

988

Employee Benefits in Medium and Large Firms, 1988



U.S. Department of Labor
Bureau of Labor Statistics
August 1989

Bulletin 2336



L 2.3/10:

READER
FICHE

best copy available

Employee Benefits in Medium and Large Firms, 1988



U.S. Department of Labor
Elizabeth Dole, Secretary

Bureau of Labor Statistics
Janet L. Norwood, Commissioner
August 1989

Bulletin 2336

Preface

This bulletin presents results of a 1988 Bureau of Labor Statistics survey of the incidence and detailed provisions of employee benefit plans in medium and large firms. The Bureau's ninth survey in this series provides representative data for 31.1 million full-time employees in the Nation's private nonagricultural industries. The 1988 survey represents a significant expansion in employment coverage over the 1979-86 surveys.

The 1988 survey includes private nonfarm establishments employing 100 workers or more. Prior private sector surveys included establishments with either 100 or 250 workers or more, depending on the industry, and coverage in the services industries was limited. Enlarging the scope of the 1988 Employee Benefits Survey represents completion of the second stage of a planned survey expansion that began with the study of State and local governments in 1987. By 1990, the survey will cover the entire civilian economy, except the Federal Government, households, and agriculture; minimum establishment employment size will drop to one employee.

The 1988 expansion increased the private sector employment coverage of the survey by nearly 50 percent and affected many of the survey tabulations, as benefit practices often differed between the newly studied establishments and those previously within the scope of the survey. (In this bulletin, the former survey coverage is referred to as the "old scope.") To permit comparison of 1988 findings with those of prior years, chapter 10 of this bulletin contains selected tables limited to establishments studied in 1988 which had also been studied in earlier years—the old scope establishments. Chapter 2 highlights major differences in 1988 resulting from the survey expansion.

Appendix A provides a detailed description of the scope and statistical procedures used in the survey.

Members of the Division of Occupational Pay and Employee Benefits Levels compiled and analyzed the data presented in this bulletin. Paid leave and sickness and accident insurance data were prepared by Adam Bellet, Diane Hill, John Morton, Joseph Meisenheimer, and Margaret Simons, under the direction of James Houff. Long-term disability insurance data were compiled by Diane Hill, Natalie Kramer, David Ott, Cynthia Thompson, and Arthur Williams, and defined benefit pension and defined contribution plan data by Doug Hedger, Avy Graham, Lora Lovejoy, and Michael Miller, under the direction of John W. Thompson, Jr. Life insurance data were developed by David Ott, Cynthia Thompson, and Arthur Williams, and health insurance data by Allan Blodin, Thomas Burke, Rita Jain, Marc Kronson, and Jerline Thompson, under the direction of William Wiatrowski. Text was prepared for publication by Geraldine Norman. Computer programming and systems design were provided by David Caples, Mary Constable, Joyce Hartman, Aholivah Maier, and Cheryl Sims of the Division of Directly Collected Periodic Surveys, under the direction of Leslie Chappel. Larry Huff and Ronald Lambrecht of the Statistical Methods Group were responsible for the sample design, nonresponse adjustments, sample error computations, and other statistical procedures, under the direction of Ronny Schaul. Fieldwork for the survey was directed by the Bureau's Assistant Regional Commissioners for Operations.

Material in this publication is in the public domain and, with appropriate credit, may be reproduced without permission.

Pictured on the cover of this bulletin is *Father Feeding Infant* by Norman Rockwell, reprinted with permission by The Norman Rockwell Estate Licensing Company (c) 1957.

Contents

Page

Chapter 1. Introduction	1
Chapter 2. Highlights	2
Paid leave and disability insurance	2
Paid and unpaid parental leave	2
Health care and life insurance	2
Defined benefit pension plans	2
Defined contribution plans	4
Flexible benefits plans and reimbursement accounts	4
Other benefits	4
Chapter 3. Work schedules, paid time off, and parental leave	5
Work schedules	5
Paid lunch and rest periods	5
Paid holidays	5
Paid vacations	5
Paid personal leave	6
Paid funeral leave, jury-duty leave, and military leave	6
Parental leave	6
Chapter 4. Disability benefits	15
Overview	15
Paid sick leave	15
Sickness and accident insurance	16
Combined sick leave and sickness and accident insurance benefits	16
Long-term disability insurance	17
Chapter 5. Health care and life insurance	36
Health care	36
Summary of coverage	36
Funding arrangements	36
Payment arrangements	37
Overall limitations	37
Hospital coverage	39
Surgical coverage	39
Mental health coverage	39
Alcohol and drug abuse treatment	40
Dental coverage	40
Vision care	41
Other health benefits	41
Cost containment	41
Health maintenance organizations	41
Employee contributions	42
Participation requirements	42
Coverage for retired or laid-off workers	42
Life insurance	42

Contents—Continued

	<i>Page</i>
Chapter 6. Defined benefit pension plans	75
Chapter 7. Defined contribution plans	102
Cash or deferred arrangements	102
Savings and thrift plans	103
Profit-sharing plans	104
Participation and vesting	104
Chapter 8. Other benefits	117
Chapter 9. Plan administration	119
Plan sponsor	119
Flexible benefits plans and reimbursement accounts	119
Chapter 10. Survey comparability	122
Charts:	
1. Type of fee arrangement: Percent of full-time participants in medical plans, medium and large firms, 1980-88	37
2. Trends in selected deductible amounts: Percent of full-time participants in medical plans with deductibles, medium and large firms, 1980-88	38
3. Replacement rates under pension plans including and excluding Social Security payments: Average benefits based on 30 years of service, medium and large firms, 1988	77
4. Monthly benefits under private defined benefit pension plans: Distribution of participants assuming earnings of \$35,000 in the final year of work, medium and large firms, 1988	78
Tables:	
1. Summary: Participation in employee benefit programs, 1988	3
Work schedules:	
2. Number of hours scheduled per week	7
Paid time off:	
3. Lunch time: Minutes per day	7
4. Rest time: Minutes per day	7
5. Holidays and vacations: Average number of days	7
6. Holidays: Number of days provided each year	8
7. Holidays: Policy on holidays that fall on a regularly scheduled day off	8
8. Vacations: Amount provided at selected periods of service	9
9. Vacations: Length of service required to take vacation	11
10. Vacations by unused leave policy	11
11. Personal leave: Number of days provided per year	11
12. Funeral leave: Number of days available per occurrence	12
13. Jury-duty leave: Number of days available per occurrence	12
14. Military leave: Number of days available per year	12
15. Maternity and paternity leave policy	13
16. Unpaid maternity and paternity leave by duration of benefits	14
Short-term disability coverage:	
17. Participation in sickness and accident insurance plans and paid sick leave plans	18
18. Average short-term disability days available, and full-pay equivalent days	18

Contents—Continued

	<i>Page</i>
Paid sick leave:	
19. Type of provision	19
20. By provision	20
21. Average number of days at full pay by type of plan	22
22. Annual plans: Average number of days at full pay by accumulation policy and sickness and accident insurance coordination	23
23. Annual plans: Average number of days at full pay by sickness and accident insurance coordination	24
24. Annual plans by unused sick leave policy and carryover provisions	24
Sickness and accident insurance:	
25. Type and duration of payments	25
26. Percent-of-earnings formula by maximum weekly benefit	28
27. Length-of-service requirements for participation	29
Long-term disability insurance:	
28. Method of determining payment	30
29. Percent-of-earnings formula by maximum monthly benefit	32
30. Maximum disability income provisions by type and amount of maximum	33
31. Benefit waiting period	34
32. Duration of benefits	34
33. Length-of-service requirements for participation	35
34. Limitations on benefits for mental illness	35
Health care:	
35. Coverage for selected categories of care	44
36. Fee arrangement and financial intermediary	46
37. Overall limitations—amount of deductible	47
38. Overall limitations—out-of-pocket expense limits	48
39. Overall limitations—sum of deductible and out-of-pocket expense limits	49
40. Overall limitations—maximum benefit provisions	49
41. Hospital room and board coverage by type of benefit payments and limits to coverage	50
42. Type of payment for inpatient and outpatient surgical procedures	52
43. Second surgical opinion provisions	54
44. Mental health benefits by extent of benefits	55
45. Alcohol abuse treatment benefits by extent of benefits	56
46. Drug abuse treatment benefits by extent of benefits	57
47. Dental benefits by extent of coverage for selected procedures	58
48. Dental benefits by deductible provision	59
49. Dental benefits by yearly maximum amount of insurance	59
50. Orthodontic benefits by lifetime maximum amount of coverage	60
51. Dental preauthorization requirements	60
52. Vision benefits by extent of benefits	61
53. Coverage for selected special benefits	62
54. Selected cost containment features	63
55. Health maintenance organization features	64

Contents—Continued

	<i>Page</i>
Health care—Continued:	
56. Contributory plans by type and amount of employee contribution	65
57. Contributory stand-alone dental plans by type and amount of employee contribution	67
58. Length-of-service requirements for participation	68
59. Employer-financed coverage after retirement	68
60. Employer-financed coverage after retirement by benefit provisions and age of retiree	69
61. Employer-financed coverage during a layoff	70
Life insurance:	
62. Method of determining amount of basic life insurance and frequency of related coverages	70
63. Multiple-of-earnings formulas by amount of basic insurance and maximum coverage provisions	71
64. Flat dollar insurance by amount of basic insurance	73
65. Age-related reductions for active older workers	73
66. Length-of-service requirements for participation	73
67. Dependent life insurance coverage	74
68. Effect of retirement on basic coverage	74
Defined benefit pension plans:	
69. Method of determining retirement payments	83
70. Terminal earnings benefit formulas by type and amount of formula	84
71. Terminal earnings formulas by definition of terminal earnings	85
72. Earnings-based formulas by definition of earnings	86
73. Career earnings benefit formulas by type and amount of formula	87
74. Dollar amount benefit formulas by type and amount of formula	88
75. Provision for integration of pension with Social Security benefit	89
76. Maximum benefit provisions	90
77. Average replacement rates	91
78. Minimum age and associated service requirements for normal retirement	93
79. Minimum age and associated service requirements for early retirement	94
80. Early retirement by reduction factor for immediate start of payments	95
81. Provisions for disability retirement	95
82. Provision for credit for service after age 65	96
83. Incidence of ad hoc postretirement increases	96
84. Provisions of ad hoc postretirement increases	97
85. Vesting schedules	98
86. Provisions for early receipt of vested benefits	99
87. Provision for postretirement survivor annuity	100
88. Provision for preretirement survivor annuity	100
89. Age and length-of-service requirements for participation	101
Defined contribution plans:	
90. Retirement and capital accumulation plan coverage	106
91. Types of defined contribution plans	106
92. Combinations of defined benefit and defined contribution plans	107
93. Cash or deferred arrangements (including salary reduction plans)	107

Contents—Continued

	<i>Page</i>
Savings and thrift plans:	
94. Maximum allowable employee contribution	108
95. Incidence of pretax employee contributions	108
96. Details of pretax employee contributions	109
97. Employer matching contributions	111
98. Investment of employee and employer contributions	112
99. Withdrawal of employer contributions	113
100. Method of distribution of account	113
Selected defined contribution plans:	
101. Provisions of profit-sharing plans	114
102. Age and length-of-service requirements for participation	115
103. Vesting schedules	116
Other benefits:	
104. Percent of employees eligible	118
Plan administration:	
105. Type of plan sponsor	120
106. Flexible benefits plans and reimbursement accounts coverage	121
Former survey coverage:	
107. Summary: Participation in employee benefit programs, 1988	123
108. Holidays and vacations: Average number of days	124
109. Holidays: Number of days provided each year	124
110. Vacations: Amount provided at selected periods of service	125
111. Military leave: Number of days available per year	127
112. Short-term disability coverage: Participation in sickness and accident insurance plans and sick leave plans	127
113. Paid sick leave: Average number of days at full pay by type of plan	127
114. Sickness and accident insurance: Type and duration of payments	128
115. Long-term disability insurance: Method of determining payment	131
116. Health care: Coverage for selected categories of care	133
117. Health care: Employer-financed coverage after retirement	135
118. Life insurance: Method of determining amount of basic life insurance and frequency of related coverages	135
119. Life insurance: Effect of retirement on basic coverage	136
120. Defined benefit pension plans: Method of determining retirement payments	136
121. Defined benefit pension plans: Minimum age and associated service requirements for normal retirement	137
122. Defined benefit pension plans: Incidence of ad hoc postretirement increases and lump-sum payments	138
123. Retirement and capital accumulation plan coverage	138
124. Types of defined contribution plans	138
125. Cash or deferred arrangements (including salary reduction plans)	139
126. Other benefits: Percent of employees eligible	139
Appendixes:	
A. Technical note	140
B. Availability of the survey's data base	150

Chapter 1. Introduction

The employee benefits survey conducted by the Bureau of Labor Statistics provides data on employee work schedules and develops information on the incidence and detailed characteristics of employee benefits paid for, at least in part, by the employer. These benefits include lunch and rest periods; holidays, vacations, and personal, funeral, jury-duty, military, parental, and sick leave; sickness and accident, long-term disability, and life insurance; health care; and private retirement/capital accumulation plans. Because data collection is limited to provisions of formal plans, the extent of such benefits as rest periods and personal leave may be understated.

Data are also collected on the incidence of several other benefits, including severance pay, subsidized parking, financial counseling, child care assistance, wellness programs, employee assistance counseling programs, and educational assistance. In addition, information was obtained on flexible benefits plans, reimbursement accounts, and unpaid parental leave.

The 1988 survey covered full-time employees in medium and large establishments. Data are presented separately for three occupational groups—professional-administrative, technical-clerical, and production-service workers. The first two groups often are discussed jointly as white-collar workers; production-service workers are often called blue-collar workers. (In prior publications, production-service workers were labeled “production” workers.)

Respondents provided information on the number of workers

covered by specified benefit plans. From this, incidence tables were developed, showing the percent of employees in the survey who could receive the benefits examined. Workers covered by a plan were labeled “participants” whether or not they used a benefit. Thus, while the tables in this bulletin describe the provisions of, for example, sick leave or parental leave plans, they do not indicate the number of employees using these benefits or the amount of leave time taken.

Workers were considered as covered by a benefit plan only if the employer paid all or part of the cost of the plan.¹ Plans for which only administrative costs were paid by the employer and completely employee-financed plans are excluded from these tabulations.

Workers were counted as covered by wholly employer-financed plans that require a minimum amount of service before receiving benefits, even if the workers had not met the minimum service requirement at the time of the survey. Where plans—such as health or life insurance—required an employee to pay part of the cost (contributory plans), workers were considered participants only if they elected the plan and paid their share of the cost.

¹ An exception, however, is made in table 68, which tabulates post-retirement life insurance coverage. Plans under which retirees pay the full cost are included because the guarantee of insurability at group rates is, in itself, considered a benefit. Additionally, flexible reimbursement accounts and salary reduction plans were studied even if they were funded solely by the employee, and data on unpaid parental leave provisions are presented to reflect this important leave-of-absence practice.

Chapter 2. Highlights

The great majority of full-time workers within the scope of the Employee Benefits Survey were provided health care, life insurance, and private retirement plans, as well as paid holidays and vacations (table 1). Provisions of many employee benefit plans, however, differed markedly between white- and blue-collar workers.

The 1988 survey covered services industries not previously studied, such as health and education services, and smaller establishments (employing 100 to 249 workers) in the construction, mining, retail trade, and some manufacturing and transportation industries. (See appendix A for details of the 1988 expansion in survey coverage.)

Paid leave and disability insurance

Most paid leave provisions were available to a majority of employees. On the average, covered employees could expect to receive:

- Rest periods of 26 minutes a day.
- 9 holidays each year. Workers in old scope establishments averaged 10 holidays annually.
- Vacations of 9 days at 1 year of service, 16 days at 10 years, and 20 days at 20 years.
- 3 days of funeral leave per occurrence.
- 11 days of military leave per year.
- Jury duty as needed.
- Sick leave of 19 days per year with full pay at 5 years of service. Among workers in old scope establishments, the average was 22 days.
- Sickness and accident insurance plans averaging about 26 weeks of coverage.

Eighty-nine percent of the employees had some protection against temporary loss of income due to illness or accident through either sick leave (43 percent), sickness and accident insurance (20 percent), or both (26 percent). Most employees also had some protection against extended loss of income due to disability:

- 42 percent had long-term disability insurance.
- 30 percent were covered under pension plans that provided immediate disability benefits.

Paid and unpaid parental leave

For the first time, the survey covered parental leave programs in the private sector. These programs, which are separate from vacation, personal leave, sick leave, and sickness and accident insurance programs, allow time off

from work to care for infants.

- 33 percent of employees had unpaid maternity leave available.
- 16 percent had unpaid paternity leave available.
- Paid maternity or paternity leave was rare.

Health care and life insurance

Virtually all of the employees were participants in health and life insurance programs. Of the participants in these plans:

- 57 percent paid nothing for their own health insurance, and 36 percent paid nothing for family coverage. Where workers contributed, average monthly employee premiums were \$19.29 for individual coverage and \$60.07 for family coverage.
- 19 percent participated in health maintenance organization plans, up from 13 percent in 1986.
- 7 percent participated in preferred provider organization plans, up from 1 percent in 1986.
- 66 percent received dental care, and 35 percent received vision care.
- 86 percent were protected against catastrophic health expenses, either through ceilings on out-of-pocket employee expenses or enrollment in health maintenance organizations.
- 25 percent would receive some employer-financed health care during a layoff.
- 45 percent were in plans that continued employer-financed health care coverage after retirement. In old scope establishments, 55 percent of participants were in plans with such coverage.
- 66 percent were covered by life insurance determined by earnings.
- 18 percent received insurance on the lives of their spouses.
- 49 percent were in plans that continued employer-financed life insurance coverage after retirement. In old scope establishments, 58 percent of participants were in plans with such coverage.

Defined benefit pension plans

In 1988, 63 percent of the employees in the survey were covered by defined benefit pension plans, which have formulas for determining an employee's annuity; coverage in 1986 was 76 percent. About half of the 13-percent-

point decrease stems from the survey's expansion to smaller establishments and more services industries. Within the old scope, however, the decline was 6 percentage points—down from 76 percent to 70 percent of workers. In 1988:

- 72 percent of participants were in defined benefit pension plans with formulas based on earnings, most frequently on earnings during the last 5 years of employment.
- Benefit formulas were integrated with Social Security benefits in plans affecting 62 percent of participants.
- Common eligibility requirements for a normal, or unreduced, pension were: Age 65 with no specified

length of service, age 62 with 10 years of service, and no age requirement with 30 years of service. Workers in old scope establishments were more likely than workers as a whole to be in a plan that allowed retirement with unreduced benefits at an early age.

- 72 percent of covered workers could retire with a reduced pension at age 55, most commonly after 10 years of service.
- 26 percent of covered workers were in plans that had granted one or more postretirement increases to retirees during the past 5 years. Among old scope establishments, the figure was 30 percent.

Table 1. Summary: Percent of full-time employees by participation¹ in employee benefit programs, medium and large firms,² 1988

Employee benefit program	All employees ³	Professional and administrative employees ³	Technical and clerical employees ³	Production and service employees ³	Employee benefit program	All employees ³	Professional and administrative employees ³	Technical and clerical employees ³	Production and service employees ³
Paid:									
Holidays	96	96	98	94	Dental insurance ⁴	60	66	62	55
Vacations	98	98	99	97	Employee coverage:				
Personal leave	24	32	33	15	Wholly employer financed	40	41	35	41
Lunch period	11	5	6	17	Partly employer financed	21	25	27	14
Rest time	72	59	69	85	Family coverage:				
Jury duty leave	91	95	95	87	Wholly employer financed	30	28	26	33
Military leave	55	63	60	48	Partly employer financed	30	38	37	22
Sick leave	69	90	90	47	Life insurance	92	96	94	89
Maternity leave	2	3	2	2	Wholly employer financed	80	84	83	77
Paternity leave	1	2	1	1	Partly employer financed	12	12	12	11
Unpaid:					Defined benefit pension	63	65	64	61
Maternity leave	33	37	34	31	Wholly employer financed	59	61	60	58
Paternity leave	16	19	17	13	Partly employer financed	4	4	4	4
Sickness and accident insurance	46	30	36	60	Defined contribution ⁵	45	60	55	32
Wholly employer financed	37	23	29	49	Retirement ⁶	32	42	39	23
Partly employer financed	9	7	7	11	Wholly employer financed ⁷	14	16	17	12
Long-term disability insurance	42	63	53	24	Partly employer financed	18	25	22	11
Wholly employer financed	33	50	42	20	Capital accumulation ⁸	14	19	17	10
Partly employer financed	9	14	11	4	Wholly employer financed ⁷	3	2	2	3
Medical insurance	90	93	91	88	Partly employer financed	12	17	15	7
Employee coverage:					All retirement ⁹	80	86	83	76
Wholly employer financed	51	50	46	53	Stock option	(10)	(10)	(10)	(10)
Partly employer financed	40	43	45	35	Stock purchase	2	3	3	1
Family coverage:									
Wholly employer financed	32	29	25	38					
Partly employer financed	58	65	66	50					

¹ Participants are workers covered by a paid time off, insurance, retirement, or capital accumulation plan. Workers eligible for paid or unpaid maternity and paternity leave are also covered. Employees subject to a minimum service requirement before they are eligible for benefit coverage are counted as participants even if they have not met the requirement at the time of the survey. If employees are required to pay part of the cost of a benefit, only those who elect the coverage and pay their share are counted as participants. Benefits for which the employee must pay the full premium are outside the scope of the survey. Only current employees are counted as participants; retirees are excluded.

² See appendix A for scope of study.

³ See appendix A for definitions of the occupational groups.

⁴ The figures for dental insurance differ slightly from those published in table 1 of the April 4, 1989 news release, "BLS Reports on Employee Benefits in Medium and Large Firms in 1988," USDL: 89-160.

⁵ Defined contribution plans include money purchase pension plans, and profit sharing, savings and thrift, stock bonus, and employee stock ownership plans. The total is less than the sum of the individual items because some employees participated in both defined contribution retire-

ment and capital accumulation plans.

⁶ Defined contribution plans were classified as retirement plans if employer contributions had to remain in the participant's account until retirement age, death, disability, separation from service, age 59 1/2, or hardship.

⁷ Employees participating in two or more plans are counted as participants in wholly employer-financed plans only if all plans are noncontributory.

⁸ Includes plans in which employer contributions may be withdrawn from participant's account prior to retirement age, death, disability, separation from service, age 59 1/2, or hardship.

⁹ Includes defined benefit pension plans and defined contribution retirement plans. The total is less than the sum of the individual items because many employees participated in both types of plans.

¹⁰ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

- 14 percent of participants were in plans that had extended one or more special early retirement offers to eligible workers during the past 5 years.

Defined contribution plans

Expansion of the Employee Benefits Survey lowered the overall incidence of defined contribution plans. In old scope establishments, 52 percent of full-time workers were covered by at least one such plan, compared to 45 percent of workers in all establishments surveyed.

- Among individual types of defined contribution plans, savings and thrift plans covered 32 percent of old scope workers, compared to 25 percent overall; the figures for profit-sharing plans were 21 percent and 18 percent, respectively. Money purchase pension plans, however, were more common overall (6 percent) than in the old scope (3 percent).
- Cash or deferred arrangements, called 401(k) plans, were also more common in the old scope establishments (42 percent of workers, up from 33 percent in 1986) than in all establishments (36 percent of workers).

Flexible benefits plans and reimbursement accounts

The incidence of flexible benefits plans and reimbursement accounts rose substantially from 1986. In 1988, 13 percent of the workers were eligible for one or both of these

arrangements, up from 5 percent in 1986. Reimbursement accounts are used to pay for (often on a pretax basis) expenses not covered by a company's regular benefits package, such as insurance premiums, child care, or health care deductibles. A flexible benefits plan was defined in the survey as a plan giving employees a choice among two types of benefits or more.

- 12 percent of employees were eligible for reimbursement accounts, up from 5 percent in 1986.
- 5 percent of employees were eligible for flexible benefits plans, up from 2 percent in 1986.
- White-collar workers were more likely to be eligible for at least one of these arrangements (19 percent) than were blue-collar workers (6 percent).

Other benefits

Information was collected on the incidence of other benefits, such as child care assistance, employee assistance programs, and employee wellness programs.

- 4 percent of employees were eligible for child care assistance, up from 1 percent in 1985, the most recent survey period for which comparable data were reported. White-collar workers were more likely to be eligible for child care assistance (6 percent) than were blue-collar workers (2 percent).
- Two benefits surveyed for the first time in 1988, employee assistance programs and employee wellness programs, were available to 43 percent and 17 percent of employees, respectively.

Chapter 3. Work Schedules, Paid Time Off, and Parental Leave

Time off with pay is available to employees in several different forms—from daily rest periods to annual vacations of several weeks. In 1988, survey coverage of paid leave benefits included provisions for lunch and rest periods; holidays and vacations; and personal, funeral, jury-duty, and military leave. Paid and unpaid parental leave was also surveyed. (Information on paid sick leave appears in chapter 4.)

Work schedules

Weekly work schedules of 40 hours applied to 80 percent of the full-time employees covered by the survey (table 2). A workweek of 35 or 37.5 hours (7- or 7.5-hour days) was the norm for 16 percent of the professional-administrative employees, 21 percent of the technical-clerical employees, and 6 percent of the production-service employees. Four percent of the work force was scheduled to work other than a 5-day week.

Paid lunch and rest periods

Eleven percent of the employees received formal paid lunch periods, and 72 percent were provided formal rest time, such as coffee breaks and cleanup time (tables 3-4). Both benefits were more common among production-service employees than among white-collar workers.

Production-service employees who were covered by paid lunch period plans (17 percent) usually received 20 or 30 minutes a day, averaging 26 minutes. The 5 percent of white-collar workers eligible averaged 39 minutes of paid lunch time each day. Paid rest time, averaging 26 minutes a day for both white-collar and production-service employees, was provided most commonly as two daily breaks of 10 or 15 minutes each.

	All participants	Professional and administrative	Technical and clerical	Production and service
Lunch time—average minutes per day	29	38	41	26
Rest time—average minutes per day	26	26	26	26

Paid holidays

Paid holidays, averaging 9.4 days per year, were provided to 96 percent of full-time employees. Two-thirds of the drop in participation and number of holidays from 1986, when 99 percent of the employees averaged 10.0 holidays, resulted from survey expansion. Extended holiday plans, such as the Christmas-New Year's Day period provided in the auto industry, floating holidays, and "personal holidays," such as employee birthdays, were included in the holiday plans reported (tables 5-7).

When a holiday fell on a scheduled day off, such as a Saturday or Sunday, another day off was regularly granted to 83 percent of the employees. Most of the remaining workers received either another day off or an additional day's pay, depending on when the holiday fell.

Paid vacations

Almost all employees (98 percent) were provided paid vacations (tables 5, and 8-10). (The slight drop in participation and variation in average vacation days from 1986 was also largely due to the survey expansion.) Vacation provisions for employees in the expanded survey averaged 9.0 days at 1 year of service, 16.1 days at 10 years, 20.1 days at 20 years, and 21.7 days at 30 years; these averages differed significantly from the old scope figures shown in table 108, which have been virtually unchanged since 1980—the first year such estimates were developed. Plans covering professional-administrative employees generally provided more vacation days than those for other employees. For example, 65 percent of the professional-administrative employees became eligible for at least 15 days of vacation at 5 years of service; this compares with 37 percent of the production-service employees. In cases where holidays, vacation, sick leave days, or personal leave are combined under one leave category and could not be shown separately, it was reported as vacation time. These consolidated leave plans or "leave banks" have been adopted by some hospitals.

Nearly all white-collar employees received their regular salaries or earnings during vacation periods. Nine-tenths of the production-service employees also received such vacation pay; nearly all of the others were provided vacation payments based on a percentage of annual earnings. Anniversary-year bonus

vacation days, such as an extra week of vacation at 10 and 20 years of service, were included in the count of regular vacation time.

Virtually all employees covered by vacation plans had to work for a specified period before being able to take a vacation. The most prevalent length-of-service requirement was 6 months for white-collar participants and 1 year for blue-collar participants.

In 1988, the survey covered carryover provisions for unused vacation time as well as cash-in provisions. Unused vacation days could be carried over into the next year by 25 percent of the plan participants; 15 percent could cash in some or all of their vacation days at the end of the year; and 5 percent had both cash-in and carryover provisions. The majority, 54 percent, lost vacation days that were unused at the end of the year. The carryover provision was more prominent among white-collar participants, while the cash-in policy was more common among blue-collar participants.

Paid personal leave

Formal personal leave, which allows employees to be absent from work with pay for a variety of reasons not covered by other specific leave plans, was provided to one-fourth of the employees (table 11). One-third of the white-collar employees received personal leave, more than twice the proportion of blue-collar employees with this benefit. Most commonly, employees who were provided with personal leave were eligible for 1 to 5 days. As the following table shows, average days per year varied little by occupational group:

All participants	3.3
Professional and administrative	3.4
Technical and clerical	3.3
Production and service	3.1

A few employees, primarily white-collar, were provided as much personal leave as needed. The survey did not cover the extent of informal personal leave.

Paid funeral leave, jury-duty leave, and military leave

At least 83 percent of the employees in each occupational group were eligible for paid leave to attend funerals of family members (table 12). Four-fifths of the employees received a set number of days per occurrence, averaging 3.2 days. Averages were nearly uniform among the occupational groups studied, as shown below:

All participants	3.2
Professional and administrative	3.2
Technical and clerical	3.3
Production and service	3.1

The relationship to the deceased determined the number of days off for just over one-fifth of the employees. These workers were included in the count of workers having a set number of days; the maximum number of days off was reported for each plan with this relationship provision. (For some employees not provided a separate funeral leave plan, employers may provide

an informal benefit or allow employees to use other types of paid leave, such as paid sick leave days, to attend a funeral.)

Nine of ten workers were eligible for paid leave while serving as a juror (table 13). Paid time off for jury duty was usually provided "as needed"; employer payments commonly made up the difference between the employee's regular pay and the court's jury allowance.

Military leave, providing pay for absence from work to fulfill military training or duty commitments, was available in establishments employing 55 percent of the employees compared to 65 percent of employees in the old scope establishments. The most common provision was 2 weeks off per year, but 14 percent of the workers were in establishments providing military leave as needed (table 14). For workers with a specified number of days off, military leave averaged 11.5 workdays per year. As shown below, the average was nearly uniform for all three occupational groups:

All participants	11.5
Professional and administrative	11.6
Technical and clerical	11.4
Production and service	11.4

Pay for military leave was either regular pay or the difference between regular pay and military pay.

Parental leave

Unpaid maternity leave was available under plans covering 33 percent of the employees; 16 percent were eligible for unpaid paternity leave (tables 15-16). Only 2 percent of the workers had paid maternity or paternity leave coverage. Parental leave plans, surveyed in the private sector for the first time in 1988, were defined by BLS as separate from an employee's other leave plans, such as short-term disability and paid vacations, which might be used by a new mother or father. Unpaid maternity and paternity leave generally could be taken after regular paid leave was used, and could continue for a fixed period of time. Employees had a reasonable expectation of returning to their own or a similar job following leave, although this was not always specifically guaranteed.

For plans that provided a fixed number of days of unpaid maternity or paternity leave, both maternity and paternity benefits averaged just over 4 months in duration. As shown below, the average months varied by occupational group:

	Unpaid maternity leave months	Unpaid paternity leave months
All participants	4.4	4.2
Professional and administrative ..	4.8	4.8
Technical and clerical	4.5	4.3
Production and service	4.0	3.7

Plans differed considerably in the number of unpaid months allowed, ranging from under 1 to slightly over 12 months. Nearly all plans with both maternity and paternity leave allowed the same length of time off for each reason.

Table 2. Work schedules: Percent of full-time employees by number of hours scheduled per week,¹ medium and large firms, 1988

Work schedule	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Hours per week:				
Under 35	1	(¹)	(¹)	2
35	4	4	6	2
Over 35 and under 37.5	2	2	3	1
37.5	8	12	15	4
Over 37.5 and under 40	2	2	3	(¹)
40	80	76	72	86
Over 40 and under 50	3	2	1	5
50 and over	(¹)	1	(¹)	(¹)
Hours per week not available	(¹)	1	(¹)	(¹)

¹ Work schedule data include regularly scheduled overtime, paid lunch, and paid rest periods.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 3. Paid lunch time: Percent of full-time employees by minutes of paid lunch time per day, medium and large firms, 1988

Minutes per day	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Provided paid lunch time	11	5	6	17
Under 20 minutes	1	(¹)	(¹)	1
20 minutes	3	(¹)	(¹)	6
Over 20 and under 30 minutes	(¹)	-	-	(¹)
30 minutes	6	3	3	9
Over 30 minutes	1	2	2	1
Number of minutes not available	(¹)	(¹)	(¹)	(¹)
Not provided paid lunch time	89	95	94	83

¹ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 4. Paid rest time: Percent of full-time employees by minutes of paid rest time per day, medium and large firms, 1988

Minutes per day	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Provided paid rest time	72	59	69	80
Under 15 minutes	1	(¹)	(¹)	1
15 minutes	4	4	7	4
Over 15 and under 20 minutes	(¹)	(¹)	(¹)	(¹)
20 minutes	23	16	16	30
Over 20 and under 30 minutes	2	1	1	4
30 minutes	39	38	44	37
Over 30 and under 40 minutes	(¹)	(¹)	-	(¹)
40 minutes	1	(¹)	(¹)	1
Over 40 minutes	1	(¹)	(¹)	3
Number of minutes not available	(¹)	(¹)	(¹)	(¹)
Not provided paid rest time	28	41	31	20

¹ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 5. Paid holidays and vacations: Average number of days for full-time participants, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Paid holidays	9.4	9.6	9.4	9.2
Paid vacation by length of service: ¹				
At 6 months	5.7	6.5	5.7	5.1
At 1 year	9.0	10.8	9.7	7.6
At 3 years	10.8	11.8	11.0	10.2
At 5 years	13.1	14.4	13.6	12.1
At 10 years	16.1	17.2	16.5	15.2
At 15 years	18.3	19.3	19.0	17.4
At 20 years	20.1	21.0	20.4	19.3
At 25 years	21.3	22.3	21.8	20.5
At 30 years ²	21.7	22.7	22.2	20.9

¹ Participants are included only for the service periods for which they receive vacations.

² The average (mean) was essentially the same for longer lengths of service.

NOTE: Computation of average included half days and excluded workers with zero holidays or vacation days.

Table 6. Paid holidays: Percent of full-time employees by number of paid holidays provided each year, medium and large firms, 1988

Number of days	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Provided paid holidays	96	96	98	94
Under 5 days	2	1	1	2
5 days	3	1	2	4
5 days plus 1 half day	(¹)	(¹)	(¹)	(¹)
6 days	9	7	9	10
6 days plus 1 or 2 half days	(¹)	(¹)	(¹)	(¹)
7 days	9	7	10	10
7 days plus 1 or more half days ..	(¹)	(¹)	(¹)	(¹)
8 days	11	11	12	10
8 days plus 1 or 2 half days	1	1	2	1
9 days	9	10	10	9
9 days plus 1 or more half days ..	1	1	1	1
10 days	20	21	22	17
10 days plus 1 or more half days ..	(¹)	(¹)	(¹)	(¹)
11 days	13	12	13	14
11 days plus 1 or 2 half days	(¹)	1	1	(¹)
12 days	10	13	10	8
12 days plus 1 or 2 half days	(¹)	(¹)	(¹)	(¹)
13 days	6	5	3	7
13 days plus 2 half days	(¹)	(¹)	(¹)	(¹)
14 days	1	1	1	1
More than 14 days	1	1	1	1
Number of days not available	(¹)	-	-	(¹)
Not provided paid holidays	4	4	2	6

¹ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 7. Paid holidays: Percent of full-time participants by policy on holidays that fall on a regularly scheduled day off, medium and large firms, 1988

Holiday policy	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Holiday is not observed	2	2	2	2
Another day off granted	83	90	87	78
Additional day's pay in lieu of holiday	4	2	2	6
Another day off or day's pay, depending on when holiday falls ...	9	5	6	13
Another day off or holiday not observed, depending on when holiday falls	1	1	1	1
Other provision applies ¹	1	1	1	1
Holiday policy not determinable	(²)	(²)	(²)	(²)

¹ Includes plans where the policy differs by holiday.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 8. Paid vacations: Percent of full-time employees by amount of paid vacation provided at selected periods of service, medium and large firms, 1988

Vacation policy	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees	Vacation policy	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100	At 5 years of service—Continued				
Provided paid vacations ¹	98	98	99	97	Over 5 and under 10 days	(²)	(²)	(²)	1
At 6 months of service:					10 days	40	27	34	51
Under 5 days	5	2	4	7	Over 10 and under 15 days	6	6	5	7
5 days	37	42	48	29	15 days	42	50	51	33
Over 5 and under 10 days	9	16	12	4	Over 15 and under 20 days	2	2	2	1
10 days	3	6	5	1	20 days	3	8	3	1
Over 10 and under 15 days	1	2	1	(²)	Over 20 and under 25 days	1	2	1	1
15 days	(²)	1	(²)	(²)	25 days and over	1	3	2	1
Over 15 days	1	1	(²)	(²)	At 10 years of service:				
At 1 year of service:					Under 5 days	(²)	(²)	(²)	1
Under 5 days	1	(²)	(²)	1	5 days	1	(²)	(²)	1
5 days	30	11	16	49	Over 5 and under 10 days	(²)	-	-	(²)
Over 5 and under 10 days	1	(²)	1	1	10 days	8	4	5	12
10 days	56	67	73	42	Over 10 and under 15 days	1	(²)	(²)	1
Over 10 and under 15 days	2	3	3	1	15 days	59	53	62	60
15 days	4	8	3	1	Over 15 and under 20 days	6	4	4	8
Over 15 and under 20 days	1	1	1	(²)	20 days	19	29	22	13
20 days	1	4	1	(²)	Over 20 and under 25 days	1	3	2	1
Over 20 and under 25 days	1	2	1	1	25 days	1	1	1	(²)
25 days and over	(²)	1	(²)	(²)	Over 25 days	2	3	3	1
At 3 years of service:					At 15 years of service:				
Under 5 days	(²)	(²)	(²)	1	Under 5 days	(²)	(²)	(²)	1
5 days	4	1	2	7	5 days	1	(²)	(²)	1
Over 5 and under 10 days	1	(²)	(²)	2	Over 5 and under 10 days	(²)	-	-	(²)
10 days	74	68	79	74	10 days	5	3	2	8
Over 10 and under 15 days	6	5	5	7	Over 10 and under 15 days	(²)	(²)	(²)	(²)
15 days	8	13	8	5	15 days	26	18	22	32
Over 15 and under 20 days	1	1	1	(²)	Over 15 and under 20 days	4	4	4	4
20 days	2	4	2	(²)	20 days	55	63	64	45
Over 20 and under 25 days	1	2	2	1	Over 20 and under 25 days	3	3	2	2
25 days and over	1	1	1	(²)	25 days	2	3	2	2
At 5 years of service:					Over 25 and under 30 days	1	1	1	1
Under 5 days	(²)	(²)	(²)	1	30 days	(²)	1	1	(²)
5 days	1	(²)	1	2	Over 30 days	1	2	1	(²)

See footnotes at end of table.

Table 8. Paid vacations: Percent of full-time employees by amount of paid vacation provided at selected periods of service, medium and large firms, 1988—Continued

Vacation policy	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees	Vacation policy	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
At 20 years of service:					At 25 years of service—Continued				
Under 5 days	(¹)	(¹)	(¹)	1	20 days	33	36	37	29
5 days	1	(¹)	(¹)	1	Over 20 and under 25 days	3	4	3	2
Over 5 and under 10 days	(¹)	-	-	(¹)	25 days	36	40	38	32
10 days	5	2	2	7	Over 25 and under 30 days	2	2	2	2
Over 10 and under 15 days	(¹)	(¹)	(¹)	(¹)	30 days	4	3	3	4
15 days	14	8	12	18	Over 30 days	2	2	2	1
Over 15 and under 20 days	1	1	1	1	At 30 years of service: ³				
20 days	51	56	60	44	Under 5 days	(¹)	(¹)	(¹)	(¹)
Over 20 and under 25 days	4	4	4	4	5 days	1	(¹)	(¹)	2
25 days	19	22	17	19	Over 5 and under 10 days	(¹)	-	-	(¹)
Over 25 and under 30 days	1	1	1	1	10 days	5	2	2	7
30 days	1	1	1	1	Over 10 and under 15 days	(¹)	(¹)	(¹)	(¹)
Over 30 days	1	2	2	1	15 days	13	8	11	17
At 25 years of service					Over 15 and under 20 days	1	(¹)	(¹)	1
Under 5 days	(¹)	(¹)	(¹)	(¹)	20 days	32	35	36	27
5 days	1	(¹)	(¹)	2	Over 20 and under 25 days	2	3	3	2
Over 5 and under 10 days	(¹)	-	-	(¹)	25 days	32	34	35	29
10 days	5	2	2	7	Over 25 and under 30 days	2	2	1	2
Over 10 and under 15 days	(¹)	(¹)	(¹)	(¹)	30 days	9	9	7	9
15 days	13	8	11	17	Over 30 days	2	3	3	2
Over 15 and under 20 days	1	(¹)	(¹)	1	Not provided paid vacations	2	2	1	3

¹ Employees receiving no paid vacations in their early years of service are included in the overall percentage of workers provided paid vacations; however, they are disregarded in computing the distributions by length of service up to the service period at which they become eligible for vacations.

² Less than 0.5 percent.

³ Provisions were virtually the same after longer years of service.

NOTE: Data include anniversary year bonus days. Dash indicates no employees in this category.

Table 9. Paid vacations: Percent of full-time participants by length of service required to take vacation, medium and large firms, 1988

Length of service requirement	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
With service requirement	96	94	96	97
1 month	7	10	8	5
2 months	2	3	2	1
3 months	8	9	10	7
4-5 months	1	1	2	1
6 months	34	43	43	25
7-11 months	1	1	1	2
1 year	41	28	29	55
Over 1 year	(¹)	(¹)	(¹)	(¹)
Without service requirement	4	5	3	3
Service requirement not determinable	(¹)	(¹)	1	(¹)

¹ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 10. Paid vacations: Percent of full-time participants by unused vacation policy, medium and large firms, 1988

Policy	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Carryover only	25	32	31	16
Cash-in only	15	11	11	19
Carryover and cash-in	5	6	5	4
Unused benefit lost	54	51	52	58
Data not available	1	1	1	1

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 11. Paid personal leave: Percent of full-time employees by number of paid personal leave days provided per year, medium and large firms, 1988

Number of days	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Provided paid personal leave	24	32	33	15
1 day	4	5	4	3
2 days	5	6	7	2
3 days	4	6	6	2
4 days	3	3	4	3
5 days	3	4	4	1
More than 5 days	2	3	3	1
No maximum specified ¹	3	5	4	1
Varies by length of service	1	1	2	1
Number of days not available	(¹)	-	-	(¹)
Not provided paid personal leave	76	68	67	85

¹ Workers were provided as much personal leave as they needed.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 12. Paid funeral leave: Percent of full-time employees by number of paid funeral leave days available per occurrence, medium and large firms, 1988

Number of days	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Provided paid funeral leave	85	86	88	83
1 day	2	2	2	2
2 days	3	2	3	4
3 days	65	60	61	69
4 days	2	3	3	2
5 days	8	10	13	5
More than 5 days	(¹)	(¹)	(¹)	(¹)
Varies by length of service	4	7	6	1
Number of days not available	(¹)	(¹)	(¹)	(¹)
Not provided paid funeral leave	15	14	12	17
Number of days varies by relationship to deceased ²	21	22	24	13

¹ Less than 0.5 percent.

² The maximum number of days provided for any occurrence was included in the distribution of funeral leave days.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 13. Paid jury-duty leave: Percent of full-time employees by number of paid jury-duty leave days available per occurrence, medium and large firms, 1988

Number of days	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Provided paid jury-duty leave	91	95	95	87
Under 10 days	1	1	1	1
10 days	5	4	4	5
11-19 days	1	1	1	1
20 days	1	1	1	1
21-29 days	1	1	1	(¹)
30 days	1	1	1	2
More than 30 days	(¹)	(¹)	(¹)	(¹)
No maximum specified ²	82	86	86	77
Number of days not available	(¹)	(¹)	(¹)	(¹)
Not provided paid jury-duty leave	9	5	5	13

¹ Less than 0.5 percent.

² Jury-duty leave is provided as needed.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 14. Paid military leave: Percent of full-time employees by number of paid military leave days available per year, medium and large firms, 1988

Number of days	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Provided paid military leave	55	63	60	48
Under 5 days	(¹)	(¹)	(¹)	(¹)
5 days	1	1	2	(¹)
10 days	33	37	37	29
11-14 days	2	2	2	1
15 days	2	3	2	2
16-19 days	1	2	2	1
20 days	1	1	1	1
21-24 days	(¹)	(¹)	(¹)	(¹)
30 days	1	1	1	1
More than 30 days	(¹)	(¹)	(¹)	(¹)
No maximum specified ²	14	15	13	13
Number of days not available	(¹)	(¹)	(¹)	(¹)
Not provided paid military leave	45	37	40	52

¹ Less than 0.5 percent.

² Military leave is provided as needed.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 15. Maternity and paternity leave:¹ Percent of full-time employees by leave policy, medium and large firms, 1988

Employer leave policy	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Maternity leave				
Total	100	100	100	100
Eligible for paid leave	2	3	2	2
Eligible for unpaid leave	33	37	34	31
Fixed number of days available	30	34	31	28
Information not available on duration	3	3	3	3
Not eligible for maternity leave	64	60	64	67
Paternity leave				
Total	100	100	100	100
Eligible for paid leave	1	2	1	1
Eligible for unpaid leave	18	19	17	13
Fixed number of days available	14	17	15	12
Information not available on duration	1	2	2	1
Not eligible for paternity leave	83	80	82	86

¹ Paid or unpaid leave provided to new mothers or fathers for the specific purpose of caring for their child during the early days of its infancy. This plan is separate from any sick leave, annual leave, vacation, personal leave, or short-term disability plan that the employee may take.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 16. Unpaid maternity and paternity leave:¹ Percent of eligible full-time employees by duration of benefits, medium and large firms, 1988

Duration	All eligible employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Unpaid maternity leave				
Total	100	100	100	100
Under 1 month	1	2	1	1
1 month	1	1	1	1
Over 1 but under 2 months	23	17	18	31
2 months	1	1	1	2
Over 2 but under 3 months	9	9	10	10
3 months	10	11	12	8
Over 3 but under 4 months	2	2	2	2
4 months	10	10	11	10
Over 4 but under 5 months	7	8	9	5
Over 5 but under 6 months	4	4	3	5
6 months	17	18	21	15
Over 6 but under 8 months	(²)	(²)	1	(²) ¹
Over 8 but under 9 months	3	2	2	3
9 months	1	1	(²)	1
Over 9 but under 10 months	(²)	(²)	(²)	(²)
12 months	9	12	8	7
Over 12 months	(²)	1	(²)	(²)
Unpaid paternity leave				
Total	100	100	100	100
Under 1 month	4	3	3	4
1 month	1	1	(²)	(²)
Over 1 but under 2 months	24	18	22	31
2 months	2	2	2	2
Over 2 but under 3 months	10	9	9	12
3 months	14	16	15	11
Over 3 but under 4 months	(²)	1	(²)	(²)
4 months	3	3	3	2
Over 4 but under 5 months	12	11	11	13
Over 5 but under 6 months	2	1	1	3
6 months	17	19	22	12
Over 6 but under 8 months	(²)	(²)	(²)	(²)
Over 8 but under 9 months	1	1	1	2
12 months	11	16	10	7

¹ Includes only plans that allowed a fixed number of unpaid leave days.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Chapter 4. Disability Benefits

Three types of disability benefits are discussed in this chapter: Sick leave, sickness and accident insurance, and long-term disability insurance. Paid sick leave and sickness and accident insurance provide workers protection against loss of income during temporary absences from work due to illness or accident. During more extended periods of disability, workers' income may be continued through long-term disability insurance or disability pensions.

Overview

In 1988, short-term disability protection was available to 89 percent of all employees in the survey through sick leave, sickness and accident insurance, or both. Coverage reported in 1986 was 94 percent. The survey's expansion in scope accounts for three-fifths of the decline. (See old scope estimates in table 112.) Sick leave usually provides 100 percent of the worker's normal earnings, whereas sickness and accident insurance usually replaces 50 to 67 percent of pay.

Twenty-six percent of the workers had sick leave plans which were coordinated with sickness and accident insurance. Coordination is accomplished by either starting insurance benefits after sick leave pay has ended, or paying both benefits concurrently. When payments are made from both sources, sick leave pay is reduced by the amount of the insurance benefits so that the total benefit does not exceed full salary. Regardless of the method of coordination, employers offering sickness and accident insurance tend to allow fewer sick leave days than those not offering such insurance. At 5 years of service, for example, annual sick leave plans coordinated with insurance granted an average of 12.3 days at full pay—just over half the days provided by plans without insurance. This gap widened as years of service increased.

Previous Employee Benefits Surveys focused separately on the provisions of sick leave and sickness and accident insurance plans. In the 1988 survey, new measures are presented which combine the data on the number of days of paid time off available to employees for short-term disabilities.² For example, employees with 5 years of service were, on average, eligible for 104 days of short-term disability benefits (table 18). Many of these days, particularly those from sickness and accident insurance plans, were paid at less than the regular rate of pay; consequently, an average

of 64 full-pay equivalent days resulted.

Long-term disability (LTD) insurance, which typically pays 50 or 60 percent of earnings, was available to 42 percent of the employees; 30 percent (some also with LTD insurance) were eligible for immediate disability benefits under their pension plans.

LTD insurance payments usually begin after 6 months of disability and continue to retirement age or for a specified number of months, depending on the worker's age at the time of disability. Career-ending disabilities may entitle an employee to an immediate pension, or the pension may be deferred until other forms of income, such as LTD insurance, have ceased. (Disability provisions of pension plans are discussed in chapter 6.)

Paid sick leave and LTD insurance were more prevalent among white-collar workers, while sickness and accident insurance and immediate disability pension benefits were more prevalent among blue-collar workers.

Paid sick leave

Of the employees covered by paid sick leave plans, 79 percent were allowed a specified number of days per year (annual sick leave plans). Another 14 percent of the participants were provided sick leave benefits for each illness (per disability plans), while most of the remainder were covered by both annual and per disability benefits or plans that provided time off as needed. The number of days of sick leave granted varied widely by the type of sick leave plan as well as by specific provisions of each plan. Within individual annual and per disability plans, the maximum number of days granted was either uniform for all covered employees or increased with seniority (tables 17, and 19-24).

Because annual sick leave plans do not renew benefits after each illness, almost half of the employees covered were allowed to carry over and accumulate unused sick leave from year to year (cumulative plans). Such plans typically granted fewer days per year than plans in which unused days were not accumulated. For example, at 20 years' service, cumulative annual plans averaged 13.5 days at full pay, while noncumulative plans averaged 43.9 days. One-fourth of the workers with carryover provisions were allowed to accumulate an unlimited amount of sick leave; nearly three-fourths had limits on the amount of sick leave that could be carried over to the next year, with a majority of these workers allowed to accumulate at least 50 days; and the remainder had carryover provisions that varied by length of service.

Per disability sick leave plans generally provided more

² For further analysis of combined sick leave and sickness and accident insurance plan provisions, see James N. Houff and William J. Wiatrowski, "Analyzing short-term disability benefits," *Monthly Labor Review*, June 1989, pp. 3-9.

days of paid leave for an illness than annual plans. For per disability plans, the average number of days at full pay was 52.9 at 1 year of service, 73.1 at 5 years of service, 103.7 at 15 years of service, and 126.2 at 25 years of service.

Under annual plans, the average number of days available was 13.2 at 1 year, 19.0 days at 5 years, 26.8 days at 15 years, and 30.0 at 25 years. Workers in old scope establishments averaged 1 to 8 days more sick leave per year, depending on length of service, than workers in the overall survey.

Partial-pay benefits were available after full-pay benefits ended to 20 percent of sick leave participants with 5 years of service. In some of these plans, the number of days with full-pay benefits increased with seniority and the number of days with partial-pay benefits decreased, eventually resulting in all sick leave days at full pay. Another 3 percent of the participants had only partial-pay benefits available.

Sick leave plans commonly had a short service requirement, generally 3 months, before new employees became eligible for benefits.

Nearly seven-eighths of the sick leave participants were in plans providing benefits on the first day of illness to employees with 1 year of service. The remainder typically had to wait 1 to 5 workdays, with the waiting period often eliminated after 10 or 15 years of service.

Sickness and accident insurance

Sickness and accident insurance plans protected 46 percent of all employees against income losses due to short-term disabilities. Employers paid the entire cost of benefits for 80 percent of participants. The 20 percent who were required to contribute toward the cost of coverage most often paid a fixed amount, usually between \$2 and \$3 a month, or paid a percent of monthly earnings. Most of the others had the cost included in the premium for an insurance package (tables 17, and 25-27).

Benefit payments under sickness and accident insurance plans were either a percent of employee earnings or a scheduled dollar amount. White-collar participants were more likely to be covered by plans with earnings-based formulas (84 percent) than were blue-collar participants (47 percent). Conversely, blue-collar participants were more often covered by dollar amount formulas (53 percent) than were white-collar participants (16 percent). Under earnings-based formulas, the percent of earnings was usually fixed—typically 50 to 67 percent—although some plans varied the percentage by length of service, length of disability, or level of earnings. These earnings-based plans often had a dollar limit on the amount of the weekly benefit available; such limits have risen steadily since they were first recorded in 1981. For example, 33 percent of the participants had maximum weekly benefits of \$140 or more in that year; by 1988, this proportion had increased to 65 percent. Blue-collar workers were the most common recipients of scheduled dollar benefits, which provided either a fixed weekly amount (usually between \$100 and \$180) or varying weekly benefits (usually based on earnings).

The maximum weeks of coverage for each disability were fixed for all but 4 percent of participants, for whom duration of coverage varied by length of service. Of those participants with benefits lasting for a fixed period, most had 26 weeks. Other common periods were 13 and 52 weeks.

Three-fourths of the employees with sickness and accident insurance were required to be on the job for a specified minimum time before they were covered by the plan. Service requirements were usually under 6 months, but 4 percent of the participants were in plans requiring at least 1 year.

Sickness and accident insurance, unlike sick leave, usually requires a waiting period before benefits begin. The most common provisions required an employee to be out of work from 1 to 7 days due to illness or injury before payments begin. Waiting periods may be shortened or eliminated entirely for employees involved in an accident or who are hospitalized. Waiting periods may also be dropped when sickness and accident insurance is coordinated with sick leave, and insurance payments start after sick leave pay has ended.

Workers in two States, New Jersey and New York, are covered by mandatory temporary disability insurance plans that are at least partially employer financed. Both of these State plans pay benefits based on a percentage of the worker's earnings for up to 26 weeks with a limit on the weekly benefit (\$145 in New York and \$213 in New Jersey during 1988).³

Combined sick leave and sickness and accident insurance benefits

The new combined data on short-term disability plans show that a large number of days are available under sickness and accident insurance and per disability sick leave plans (table 18). In addition, because of sick leave provisions, duration of short-term disability benefits varies markedly with length of service. In 1988, employees had available an average of 95 paid days off at 1 year of service, and 116 days off at 30 years. Averages also varied by occupational group; for example, they ranged from 92 days for technical-clerical workers to 122 days for production-service workers, all with 10 years' service.

Benefit payments, particularly from sickness and accident insurance, may be less than the regular rate of pay. To account for this, "full-pay equivalent days" were developed. For example, if an employee could receive benefits for 130 workdays at 50 percent of pay, the tabulations would show 130 "days available," but 65 full-pay equivalent days (50 percent of 130 days).

In addition, the "replacement ratio," defined as the percent of an employee's regular pay that is received during available

³ Both States permit an employer to substitute a private plan for the State plan if the benefits provided are at least equivalent. In New York, many employers agree to pay the employee's share of plan costs. California and Rhode Island also have mandated temporary disability insurance plans, but these plans require no employer contribution and, thus, are not included in this survey. Hawaii, which has a temporary disability insurance law requiring private plan coverage, is excluded from the survey.

short-term disability days, provides a measurement of the pay replaced over the term of the disability. Replacement ratios are computed by dividing the full-pay equivalent days by the days available. For example, if an employee could receive 100 days available and 70 full-pay equivalent days, the replacement ratio would be 70 percent.

At 10 years of service, workers had an average of 108 days available. But, because many days were paid at partial pay (including some sick leave days at partial pay), workers would be provided the equivalent of 69 days at full pay. Thus, if an employee receiving average benefits was out of work for the entire 108-day period, 64 percent (69 divided by 108) of lost pay would be replaced. The flow of income, however, would not necessarily be constant over the disability period. If the initial days away from work were covered by paid sick leave (at full pay), and the remainder by sickness and accident insurance (at partial pay), the initial replacement rate would be higher than in the later period.

Long-term disability insurance

Long-term disability insurance continues the income of employees during extended periods of disability (tables 28-34). Generally, LTD begins after 6 months of disability and continues until retirement age, or for a specified number of months, depending on the employee's age at time of disability. For example, if an employee is disabled before age 60, LTD benefits generally continue until age 65. If disabled after age 60, however, an employee usually continues to receive LTD benefits for 5 years or to age 70, whichever is earlier.

Forty-two percent of the employees covered by the study had LTD insurance; 21 percent of the participants were required to contribute toward the cost of the plans. The most common type of employee contribution was a monthly amount per \$100 of covered earnings.⁴ The rate was typically between 20 and 40 cents per \$100 of coverage.

Service requirements found in LTD plans were usually more restrictive than for the other insurance benefits. Slightly over one-fifth of the participants had service requirements of from 1 year to 3 years or more. Because of the long-term nature of this benefit, more employers restricted eligibility to employees who had demonstrated some attachment to the company.

The degree of participation varied widely among the employee groups; white-collar workers were more than twice as likely to have LTD insurance as blue-collar workers. However, many employees not covered under LTD insurance are eligible for an immediate disability pension through their

retirement plan; three-tenths of all employees covered by the survey (38 percent of the blue-collar workers covered by the survey) had immediate disability retirement provisions.

Typically, an employee had to wait 6 months after the disability occurred before LTD payments began. Another common practice was for LTD benefits to begin after sick leave and sickness and accident insurance benefits had ended.

Long-term disability benefits were usually 50 or 60 percent of monthly pay. Most of the plans that pay a percent of predisability earnings had maximum monthly payments ranging from \$1,500 to \$7,500. Common monthly maximums ranged from \$2,500 to \$5,000; the average was \$4,900.

Seven-eighths of the white-collar participants were in plans that provided a fixed percent of earnings; about seven-tenths of the blue-collar participants were in such plans. The blue-collar participants in plans with other benefit formulas were more likely to be covered by plans paying a dollar amount that varied by the level of the worker's earnings or a percent of earnings that varied by length of service. In contrast, white-collar participants were usually in plans with a variable percentage based on the level of earnings, a flat dollar amount, or a percent of earnings that varied by length of disability.

A ceiling on income during disability was a common limitation to LTD payments, regardless of the type of plan. These ceilings affected benefits only if the amount payable from the LTD plan plus income from other sources, such as rehabilitative employment and family Social Security payments, exceeded a specified percentage (most commonly 70 or 75 percent) of predisability earnings. Four-fifths of the LTD participants were limited by these income ceilings, by the dollar maximums in plans that pay a percent of earnings, or by a combination of both.

Survivor benefits after the death of a disabled employee were available in plans covering 28 percent of the LTD participants. A lump-sum payment, usually equal to 3 times the monthly LTD benefit, was the most common survivor benefit provided.

Four-tenths of the participants were in LTD plans with special limitations on benefits for mental illness. In most of these cases, benefits were provided for a limited period (usually 24 months), unless the participant was institutionalized. In a few plans, benefits were provided for a limited period, regardless of institutionalization.

⁴ Covered earnings refers to that portion of a worker's earnings to which the replacement rate formula is applied. For example, if an LTD plan pays 60 percent of monthly earnings up to \$3,000, covered earnings are \$5,000 (60 percent of \$5,000 equals \$3,000.)

Table 17. Short-term disability coverage: Percent of full-time employees by participation in sickness and accident insurance plans and paid sick leave plans, medium and large firms, 1988

Type of plan	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
With short-term disability coverage ..	89	94	95	84
Sickness and accident insurance only	20	4	5	37
Wholly employer financed	17	3	4	32
Paid sick leave only	43	64	59	24
Combined sickness and accident insurance/paid sick leave	26	26	31	23
Wholly employer financed	20	19	25	17
Without short-term disability coverage	11	6	5	16

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 18. Short-term disability benefits:¹ Average number of days available and percent of pay covered for full-time participants, medium and large firms, 1988

Length of service	All participants			Professional and administrative participants			Technical and clerical participants			Production and service participants		
	Days available	Full-pay equivalent days ²	Replacement ratio ³	Days available	Full-pay equivalent days ²	Replacement ratio ³	Days available	Full-pay equivalent days ²	Replacement ratio ³	Days available	Full-pay equivalent days ²	Replacement ratio ³
At 1 year	95	55	58	84	62	74	76	50	66	113	54	48
At 3 years	99	59	60	89	67	75	80	55	69	117	57	49
At 5 years	104	64	62	95	74	78	86	60	70	119	60	50
At 10 years	108	69	64	102	80	78	92	67	73	122	62	51
At 15 years	112	72	64	105	84	80	95	71	75	125	64	51
At 20 years	114	74	65	108	87	81	98	73	74	127	66	52
At 25 years	115	75	65	110	89	81	100	75	75	128	67	52
At 30 years	116	76	66	111	89	80	100	75	75	128	67	52

¹ Coverage includes annual and per-disability sick leave, sickness and accident insurance, and any combinations available. Averages are for the first illness of the year, with no benefits carried over from prior years. Benefits may or may not require a waiting period, either initially, or between various payments.

² Full-pay equivalent days take into account days available at full and partial pay. For example, an employee receiving 30 days at full pay and 60 days at half pay would have 60 full-pay equivalent days (30 times 1.00 + 60 times .50).

³ Represents the percent of full pay replaced during the available short-term disability days. An employee with 110 days available and 60 full-pay equivalent days has a replacement ratio of 55 percent.

NOTE: Averages exclude workers covered by plans that do not specify the maximum number of days available, and workers not covered by short-term disability benefit plans.

Table 19. Paid sick leave: Percent of full-time employees by type of provision, medium and large firms, 1988

Provision	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Provided paid sick leave	69	90	90	47
Sick leave provided on:				
An annual basis only ¹	54	62	72	41
A per disability basis only ²	10	18	12	4
Both an annual and per disability basis	3	4	5	1
As needed basis ³	2	5	2	(⁴)
Other basis ⁵	(⁴)	(⁴)	(⁴)	(⁴)
Not provided paid sick leave	31	10	10	53

¹ Employees earn a specified number of sick leave days per year. This number may vary by length of service.

² Employees earn a specified number of sick leave days for each illness or disability. This number may vary by length of service.

³ Plan does not specify maximum number of days.

⁴ Less than 0.5 percent.

⁵ Includes formal plans with provisions that change from a specified number of days per year to a specified number of days per absence after a certain service period.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 20. Paid sick leave: Percent of full-time employees by sick leave provision, medium and large firms, 1988

Sick leave policy ¹	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees	Sick leave policy ¹	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100	At 10 years of service—Continued				
Provided paid sick leave ²	69	90	90	47	15 and under 30 days	4	6	6	2
Sick leave provided annually ³	57	67	76	42	30 and under 60 days	4	7	7	2
At 6 months of service:					60 and under 120 days	5	9	6	1
Under 5 days	14	11	20	13	120 and under 180 days ..	2	6	3	(⁴)
5 and under 10 days	23	29	34	14	180 days or more	(⁴)	1	(⁴)	(⁴)
10 and under 15 days	5	10	7	1	At 15 years of service:				
15 and under 30 days	3	6	4	1	Under 5 days	3	1	1	4
30 and under 60 days	1	1	(⁴)	(⁴)	5 and under 10 days	20	15	25	20
60 and under 120 days	1	2	(⁴)	(⁴)	10 and under 15 days	18	22	27	11
120 and under 180 days ..	1	2	(⁴)	(⁴)	15 and under 30 days	4	6	6	2
180 days or more	(⁴)	(⁴)	(⁴)	(⁴)	30 and under 60 days	3	4	4	1
At 1 year of service:					60 and under 120 days ..	6	10	8	2
Under 5 days	4	2	3	6	120 and under 180 days ..	3	7	3	1
5 and under 10 days	22	18	31	21	180 days or more	1	1	1	(⁴)
10 and under 15 days	20	27	29	10	At 20 years of service:				
15 and under 30 days	6	11	9	1	Under 5 days	3	1	1	4
30 and under 60 days	1	3	1	(⁴)	5 and under 10 days	20	15	25	20
60 and under 120 days ..	1	2	(⁴)	(⁴)	10 and under 15 days	18	22	27	11
120 and under 180 days ..	1	2	1	(⁴)	15 and under 30 days	4	6	5	2
180 days or more	(⁴)	(⁴)	(⁴)	(⁴)	30 and under 60 days	2	4	4	1
At 5 years of service:					60 and under 120 days ..	5	9	8	2
Under 5 days	3	1	1	5	120 and under 180 days ..	3	8	4	(⁴)
5 and under 10 days	20	15	25	20	180 days or more	1	2	1	1
10 and under 15 days	18	23	28	10	At 25 years of service: ⁵				
15 and under 30 days	5	8	8	2	Under 5 days	2	1	1	4
30 and under 60 days	5	10	7	2	5 and under 10 days	20	15	25	21
60 and under 120 days ..	3	6	3	1	10 and under 15 days	18	22	27	11
120 and under 180 days ..	1	3	1	(⁴)	15 and under 30 days	4	6	5	2
180 days or more	(⁴)	(⁴)	(⁴)	(⁴)	30 and under 60 days	2	4	4	1
At 10 years of service:					60 and under 120 days ..	4	7	6	2
Under 5 days	3	1	1	5	120 and under 180 days ..	4	10	6	1
5 and under 10 days	20	15	25	20	180 days or more	1	2	1	1
10 and under 15 days	18	22	27	11					

See footnotes at end of table.

Table 20. Paid sick leave: Percent of full-time employees by sick leave provision, medium and large firms, 1988—Continued

Sick leave policy ¹	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees	Sick leave policy ¹	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Sick leave provided on a per disability basis ²	13	22	16	5	At 10 years of service—Continued				
At 6 months of service:					120 and under 180 days ..	4	8	5	1
Under 5 days	(³)	(³)	1	(³)	180 days or more	1	1	1	(³)
5 and under 10 days	2	4	3	1	At 15 years of service:				
10 and under 30 days	3	6	4	1	Under 5 days	(³)	(³)	(³)	(³)
30 and under 60 days	(³)	1	(³)	(³)	5 and under 10 days	1	1	1	(³)
60 and under 120 days	1	3	1	(³)	10 and under 30 days	1	2	1	(³)
120 and under 180 days ..	2	5	2	1	30 and under 60 days	1	2	1	(³)
180 days or more	(³)	(³)	(³)	-	60 and under 120 days ..	3	5	3	1
At 1 year of service:					120 and under 180 days ..	6	11	8	2
Under 5 days	1	(³)	1	1	180 days or more	1	1	1	(³)
5 and under 10 days	1	2	2	(³)	At 20 years of service:				
10 and under 30 days	4	7	5	1	Under 5 days	(³)	(³)	(³)	(³)
30 and under 60 days	1	2	1	(³)	5 and under 10 days	1	1	1	(³)
60 and under 120 days	2	3	2	(³)	10 and under 30 days	1	2	1	(³)
120 and under 180 days ..	2	5	2	1	30 and under 60 days	1	1	1	(³)
180 days or more	(³)	(³)	(³)	-	60 and under 120 days ..	3	5	3	1
At 5 years of service:					120 and under 180 days ..	4	9	6	1
Under 5 days	(³)	(³)	(³)	(³)	180 days or more	2	3	3	1
5 and under 10 days	1	1	1	1	At 25 years of service: ⁵				
10 and under 30 days	1	3	1	(³)	Under 5 days	(³)	(³)	(³)	(³)
30 and under 60 days	2	4	3	1	5 and under 10 days	1	1	1	(³)
60 and under 120 days	4	7	6	2	10 and under 30 days	1	2	1	(³)
120 and under 180 days ..	3	7	3	1	30 and under 60 days	1	1	1	(³)
180 days or more	(³)	(³)	(³)	-	60 and under 120 days ..	2	4	3	1
At 10 years of service:					120 and under 180 days ..	5	10	6	1
Under 5 days	(³)	(³)	(³)	(³)	180 days or more	2	4	3	1
5 and under 10 days	1	1	1	(³)	As needed basis ⁷	2	5	2	(³)
10 and under 30 days	1	2	1	(³)	Other basis ⁸	(³)	(³)	(³)	(³)
30 and under 60 days	1	2	2	(³)	Not provided paid sick leave	31	10	10	53
60 and under 120 days ..	5	7	6	3					

¹ Some plans grant sick leave at partial pay, either in addition or as an alternative to full-pay provisions. Employees receiving partial pay only or no sick leave in their early years of service are included in the overall percentages of workers provided sick leave; however, they are disregarded in computing the distributions by length of service up to the service period at which they become eligible for full sick leave pay.

² The total is less than the sum of the individual breakdowns because some employees had annual and per disability plans.

³ Employees earn a specified number of sick leave days per year.

⁴ Less than 0.5 percent.

⁵ Provisions were virtually the same after longer years of service.

⁶ Employees earn a specified number of sick leave days for each illness or disability.

⁷ Plan does not specify maximum number of days.

⁸ Includes formal plans with provisions that change from a specified number of days per year to a specified number of days per absence after a certain service period.

NOTE: Because of rounding sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 21. Paid sick leave: Average number of days at full pay for full-time participants by type of plan, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Paid annual sick leave ¹ by length of service:				
At 6 months	9.9	14.0	7.8	7.4
At 1 year	13.2	18.7	11.5	9.4
At 3 years	15.6	22.4	14.1	10.5
At 5 years	19.0	27.6	17.6	12.0
At 10 years	24.0	35.2	22.7	14.5
At 15 years	26.8	39.0	25.7	16.3
At 20 years	28.8	41.7	27.7	17.4
At 25 years	30.0	43.2	28.8	18.4
At 30 years ²	30.4	44.0	29.4	18.6
Paid per disability sick leave ³ by length of service:				
At 6 months	52.8	58.3	44.2	47.3 ⁴
At 1 year	52.9	61.5	45.9	37.5
At 3 years	57.7	67.1	52.9	39.7
At 5 years	73.1	80.0	70.6	58.9
At 10 years	89.9	97.2	89.9	70.3
At 15 years	103.7	107.1	105.1	92.8
At 20 years	115.3	114.9	116.7	113.9
At 25 years	126.2	122.0	128.0	134.4
At 30 years ²	126.7	122.5	128.5	135.0

¹ Employees earn a specified number of sick leave days per year. This number may vary by length of service.

² The average (mean) was virtually the same after longer years of service.

³ Employees earn a specified number of sick leave days for each illness or disability. This number may vary by length of service.

NOTE: Computation of average excluded days paid at partial pay and workers with only partial pay days or zero days of sick leave.

Table 22. Paid annual sick leave:¹ Average number of days at full pay for full-time participants by accumulation policy and sickness and accident insurance coordination, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants	Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
At 1 year of service:					At 15 years of service:				
Cumulative plan	9.4	10.9	9.4	8.0	Cumulative plan	13.3	16.3	13.4	10.2
With sickness and accident insurance	8.4	9.8	9.0	7.0	With sickness and accident insurance	11.7	15.3	13.0	8.0
Without sickness and accident insurance	10.0	11.4	9.6	8.8	Without sickness and accident insurance	14.3	16.9	13.6	12.1
Noncumulative plan	17.0	26.1	14.0	10.7	Noncumulative plan	40.3	60.4	40.6	21.6
With sickness and accident insurance	9.5	16.7	9.5	6.0	With sickness and accident insurance	22.8	42.8	25.1	12.4
Without sickness and accident insurance	22.7	30.2	16.7	17.7	Without sickness and accident insurance	53.5	67.8	49.9	35.0
At 5 years of service:					At 20 years of service:				
Cumulative plan	11.2	13.4	11.3	8.8	Cumulative plan	13.5	16.5	13.6	10.5
With sickness and accident insurance	9.7	11.8	10.8	7.4	With sickness and accident insurance	11.8	15.4	13.1	8.1
Without sickness and accident insurance	12.1	14.3	11.6	10.0	Without sickness and accident insurance	14.6	17.1	14.0	12.5
Noncumulative plan	26.8	41.0	25.1	14.9	Noncumulative plan	43.9	65.4	44.7	23.5
With sickness and accident insurance	14.7	27.7	15.3	8.3	With sickness and accident insurance	25.6	48.0	28.4	13.9
Without sickness and accident insurance	35.9	46.6	31.1	24.4	Without sickness and accident insurance	57.6	72.8	54.4	37.3
At 10 years of service:					At 25 years of service:				
Cumulative plan	13.0	16.0	13.2	10.0	Cumulative plan	13.6	16.5	13.7	10.6
With sickness and accident insurance	11.4	15.0	12.8	7.8	With sickness and accident insurance	11.9	15.5	13.1	8.3
Without sickness and accident insurance	14.1	16.6	13.4	11.9	Without sickness and accident insurance	14.6	17.1	14.0	12.5
Noncumulative plan	34.8	53.3	34.1	18.4	Noncumulative plan	46.3	68.4	47.0	25.3
With sickness and accident insurance	19.3	36.9	20.0	10.8	With sickness and accident insurance	27.8	51.4	31.0	15.3
Without sickness and accident insurance	46.5	60.1	42.6	29.4	Without sickness and accident insurance	60.1	75.4	56.7	39.8

¹ Paid sick leave plans with a specified number of days available each year. Per disability plans were excluded from this table because (1) only one-fifth of the employees with per disability plans were also covered under a sickness and accident insurance plan and (2) only annual sick leave plans allow the employee to carry over and accumulate unused sick leave from one year to the next year. Instead, the number

of days of paid leave under a per disability plan is renewed for each illness or disability after the employee returns to work for a specified period. Data on per disability plans are presented in table 21.

NOTE: Computation of average excluded days paid at partial pay and workers with only partial pay days or zero days of sick leave.

Table 23. Paid annual sick leave:¹ Average number of days at full pay for full-time participants by sickness and accident insurance coordination, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
At 1 year of service:				
With sickness and accident insurance	9.0	13.1	9.2	6.4
Without sickness and accident insurance	16.1	21.3	12.7	12.8
At 5 years of service:				
With sickness and accident insurance	12.3	19.4	12.9	8.0
Without sickness and accident insurance	23.6	31.4	20.2	16.7
At 10 years of service:				
With sickness and accident insurance	15.6	25.5	16.2	9.5
Without sickness and accident insurance	29.8	39.7	26.4	20.1
At 15 years of service:				
With sickness and accident insurance	17.5	28.5	18.7	10.6
Without sickness and accident insurance	33.3	43.9	29.8	22.7
At 20 years of service:				
With sickness and accident insurance	19.1	31.0	20.3	11.5
Without sickness and accident insurance	35.5	46.7	32.0	24.1
At 25 years of service:				
With sickness and accident insurance	20.3	32.8	21.5	12.4
Without sickness and accident insurance	36.7	48.1	33.0	25.3

¹ Paid sick leave plans with a specified number of days available each year.

NOTE: Computation of average excluded days paid at partial pay and workers with only partial pay days or zero days of sick leave.

Table 24. Paid annual sick leave:¹ Percent of full-time participants by unused sick leave policy and carryover provisions, medium and large firms, 1988

Unused sick leave policy and carryover provisions	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Unused sick leave policy				
Total	100	100	100	100
Carryover only	39	40	42	35
Cash-in only	9	3	7	18
Carryover and cash-in	10	9	11	11
Unused benefit lost	41	49	39	36
Data not available	(²)	(²)	-	-
Carryover provisions				
Total	100	100	100	100
Unlimited accumulation	25	27	26	22
Limit on total number of days accumulated	73	69	72	77
Under 10 days	4	2	3	8
10 days	3	2	3	4
11 - 19 days	5	3	4	7
20 days	2	2	2	3
21 - 24 days	2	1	1	2
25 days	1	(²)	1	1
26 - 29 days	1	1	1	1
30 days	10	7	9	15
31 - 39 days	2	1	2	3
40 - 49 days	5	5	4	6
50 days	1	1	1	1
51 - 64 days	7	9	7	7
65 days	2	2	2	2
66 - 79 days	2	2	2	1
80 - 89 days	1	1	1	2
90 - 99 days	6	8	5	4
100 - 109 days	2	3	1	1
110 - 119 days	(²)	(²)	(²)	(²)
120 - 129 days	5	6	6	2
130 days	6	7	7	2
Over 130 days	5	4	6	3
Days not available	1	1	1	2
Other ³	2	4	2	1

¹ Paid sick leave plans with a specified number of days available each year.

² Less than 0.5 percent.

³ Carryover provisions vary by length of service.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 25. Sickness and accident insurance: Percent of full-time participants by type and duration of payments, medium and large firms, 1986

Type of payment	Total	Maximum weeks of coverage							Varies by service
		Less than 13	13	14-25	26	27-51	52	Greater than 52	
All participants									
All types	100	2	9	4	66	2	13	(1)	4
Fixed percent of earnings	56	1	4	3	44	(1)	3	(1)	2
Less than 50	(1)	-	(1)	-	(1)	-	-	-	(1)
50	22	(1)	1	1	19	-	(1)	(1)	(1)
55	(1)	-	-	-	(1)	(1)	-	-	(1)
60	14	(1)	1	1	9	(1)	2	(1)	1
62	(1)	-	-	-	(1)	-	-	-	(1)
65	1	(1)	(1)	(1)	(1)	-	-	-	(1)
66	(1)	-	(1)	-	(1)	-	-	-	(1)
67	13	(1)	(1)	(1)	11	-	1	-	(1)
70	2	(1)	(1)	(1)	2	-	(1)	(1)	(1)
75	2	(1)	(1)	(1)	1	-	-	-	1
80	1	(1)	-	(1)	(1)	-	(1)	-	(1)
Over 80	(1)	-	-	-	(1)	-	-	-	-
Percent of earnings varies	5	(1)	(1)	(1)	2	1	1	-	(1)
By service	2	-	-	(1)	1	-	1	-	(1)
By length of disability	1	(1)	(1)	(1)	(1)	(1)	(1)	-	(1)
By both service and length of disability	1	-	-	(1)	1	(1)	-	-	-
By earnings	1	-	-	-	(1)	(1)	-	-	-
Fixed weekly dollar benefit	29	1	5	1	17	1	2	-	2
Less than \$60	4	-	2	(1)	2	(1)	-	-	-
\$60-\$79	3	1	1	(1)	2	-	(1)	-	-
\$80-\$99	1	-	(1)	-	1	-	-	-	-
\$100-\$119	5	(1)	1	(1)	3	-	-	-	-
\$120-\$139	4	(1)	(1)	(1)	3	-	(1)	-	-
\$140-\$159	3	-	(1)	(1)	3	-	(1)	-	(1)
\$160-\$179	2	-	(1)	-	2	(1)	(1)	-	(1)
\$180-\$199	1	-	-	-	(1)	(1)	(1)	-	(1)
\$200-\$219	3	-	(1)	(1)	1	(1)	1	-	(1)
\$220 or more	2	-	(1)	(1)	1	(1)	1	-	1
Weekly dollar benefit varies	10	(1)	(1)	-	3	(1)	7	-	(1)
By earnings	10	(1)	(1)	-	2	(1)	7	-	(1)
By service or length of disability	1	-	(1)	-	1	(1)	-	-	(1)
Data not available	(1)	-	(1)	-	(1)	-	-	-	-
Professional and administrative									
All types	100	2	8	6	72	2	8	(1)	2
Fixed percent of earnings	75	1	6	5	59	(1)	1	(1)	2
Less than 50	1	-	1	-	(1)	-	-	-	-
50	30	(1)	1	1	27	-	(1)	(1)	(1)
55	(1)	-	-	-	(1)	-	-	-	-
60	18	1	2	2	13	(1)	1	(1)	1
62	(1)	-	-	-	(1)	-	-	-	-
65	1	(1)	-	1	(1)	-	-	-	-
66	(1)	-	(1)	-	(1)	-	-	-	(1)
67	15	(1)	1	1	13	-	1	-	(1)
70	3	(1)	(1)	(1)	2	-	-	(1)	(1)
75	4	(1)	1	(1)	2	-	-	-	1
80	1	-	-	(1)	(1)	-	(1)	-	-
Over 80	(1)	-	-	-	(1)	-	-	-	-
Percent of earnings varies	9	(1)	(1)	1	2	2	4	-	(1)
By service	4	-	-	(1)	1	-	3	-	(1)
By length of disability	3	(1)	(1)	(1)	-	(1)	2	-	(1)
By both service and length of disability	1	-	-	(1)	1	-	-	-	-

See footnotes at end of table.

Table 25. Sickness and accident insurance: Percent of full-time participants by type and duration of payments, medium and large firms, 1988—Continued

Type of payment	Total	Maximum weeks of coverage							
		Less than 13	13	14-25	26	27-51	52	Greater than 52	Varies by service
Professional and administrative—Continued									
By earnings	1	-	-	-	(1)	1	-	-	-
Fixed weekly dollar benefit	11	(1)	2	(1)	9	-	(1)	-	-
Less than \$60	3	-	(1)	-	3	-	-	-	-
\$60-\$79	1	(1)	(1)	-	(1)	-	-	-	-
\$80-\$99	1	-	(1)	-	1	-	-	-	-
\$100-\$119	3	(1)	1	(1)	2	-	-	-	-
\$120-\$139	(1)	-	-	-	(1)	-	-	-	-
\$140-\$159	1	-	(1)	-	1	-	-	-	-
\$160-\$179	(1)	-	-	-	(1)	-	-	-	-
\$180-\$199	(1)	-	-	-	(1)	-	-	-	-
\$200-\$219	1	-	(1)	(1)	(1)	-	(1)	-	-
\$220 or more	(1)	-	-	-	(1)	-	(1)	-	-
Weekly dollar benefit varies	5	(1)	(1)	-	2	-	3	-	(1)
By earnings	5	(1)	(1)	-	2	-	3	-	(1)
By service or length of disability	(1)	-	-	-	(1)	-	-	-	-
Data not available	(1)	-	(1)	-	(1)	-	-	-	-
Technical and clerical									
All types	100	1	8	6	73	2	6	(1)	3
Fixed percent of earnings	73	1	5	5	58	(1)	2	(1)	2
Less than 50	1	-	(1)	-	(1)	-	-	-	-
50	33	(1)	1	1	31	-	(1)	(1)	(1)
55	(1)	-	-	-	(1)	(1)	-	-	-
60	16	1	2	2	10	(1)	1	(1)	1
62	(1)	-	-	-	(1)	-	-	-	-
65	1	(1)	(1)	1	(1)	-	-	-	(1)
66	(1)	-	(1)	-	(1)	-	-	-	-
67	15	-	1	1	12	-	1	-	(1)
70	2	-	(1)	(1)	2	-	-	(1)	(1)
75	3	(1)	1	(1)	1	-	-	-	(1)
80	1	(1)	-	(1)	1	-	(1)	-	(1)
Percent of earnings varies	11	(1)	(1)	1	5	2	2	-	(1)
By service	5	-	-	(1)	3	-	2	-	(1)
By length of disability	3	(1)	(1)	1	(1)	(1)	1	-	(1)
By both service and length of disability	2	-	-	(1)	2	(1)	-	-	-
By earnings	2	-	-	-	(1)	1	-	-	-
Fixed weekly dollar benefit	12	(1)	2	(1)	9	(1)	(1)	-	-
Less than \$60	3	-	(1)	-	3	(1)	-	-	-
\$60-\$79	1	(1)	1	(1)	(1)	-	(1)	-	-
\$80-\$99	1	-	(1)	-	(1)	-	-	-	-
\$100-\$119	3	(1)	1	(1)	2	-	-	-	-
\$120-\$139	1	-	-	-	1	-	-	-	-
\$140-\$159	1	-	(1)	-	1	-	(1)	-	-
\$160-\$179	(1)	-	-	-	(1)	-	-	-	-
\$180-\$199	(1)	-	-	-	(1)	-	-	-	-
\$200-\$219	1	-	(1)	(1)	1	-	(1)	-	-
\$220 or more	(1)	-	-	-	(1)	-	(1)	-	-
Weekly dollar benefit varies	4	-	(1)	-	2	(1)	2	-	(1)
By earnings	4	-	(1)	-	2	(1)	2	-	(1)
By service or length of disability	(1)	-	(1)	-	(1)	-	-	-	-
Data not available	(1)	-	(1)	-	(1)	-	-	-	-

See footnotes at end of table.

Table 25. Sickness and accident insurance: Percent of full-time participants by type and duration of payments, medium and large firms, 1988—Continued

Type of payment	Total	Maximum weeks of coverage							
		Less than 13	13	14-25	26	27-51	52	Greater than 52	Varies by service
Production and service									
All types	100	2	9	4	62	1	16	(¹)	6
Fixed percent of earnings	45	(¹)	2	2	35	(¹)	3	(¹)	2
Less than 50	(¹)	-	(¹)	-	(¹)	-	-	-	-
50	16	(¹)	1	1	14	-	(¹)	(¹)	(¹)
55	(¹)	-	-	-	(¹)	(¹)	-	-	(¹)
60	12	(¹)	1	1	7	(¹)	2	(¹)	1
62	(¹)	-	-	-	(¹)	-	-	-	-
65	1	(¹)	(¹)	(¹)	(¹)	-	-	-	(¹)
66	(¹)	-	(¹)	-	(¹)	-	-	-	-
67	12	(¹)	(¹)	(¹)	10	-	1	-	(¹)
70	2	-	(¹)	(¹)	1	-	(¹)	(¹)	(¹)
75	2	(¹)	(¹)	(¹)	1	-	-	-	(¹)
80	(¹)	(¹)	-	(¹)	(¹)	-	(¹)	-	(¹)
Percent of earnings varies	2	(¹)	(¹)	(¹)	2	(¹)	-	-	(¹)
By service	1	-	-	-	1	-	-	-	(¹)
By length of disability	1	(¹)	(¹)	(¹)	(¹)	-	-	-	(¹)
By both service and length of disability	(¹)	-	-	(¹)	(¹)	-	-	-	-
By earnings	(¹)	-	-	-	(¹)	(¹)	-	-	-
Fixed weekly dollar benefit	39	1	6	1	23	1	4	-	3
Less than \$60	4	-	3	(¹)	1	(¹)	-	-	-
\$60-\$79	4	1	1	(¹)	2	-	(¹)	-	-
\$80-\$99	2	-	1	-	1	-	-	-	-
\$100-\$119	7	1	2	(¹)	4	-	-	-	-
\$120-\$139	6	(¹)	(¹)	(¹)	5	-	(¹)	-	-
\$140-\$159	5	-	(¹)	(¹)	4	-	(¹)	-	-
\$160-\$179	3	-	(¹)	-	2	(¹)	(¹)	-	(¹)
\$180-\$199	2	-	-	-	1	(¹)	1	-	1
\$200-\$219	3	-	-	(¹)	1	(¹)	1	-	1
\$220 or more	4	-	(¹)	(¹)	1	(¹)	1	-	1
Weekly dollar benefit varies	14	-	(¹)	-	3	(¹)	9	-	1
By earnings	13	-	(¹)	-	2	(¹)	9	-	1
By service or length of disability	1	-	(¹)	-	1	(¹)	-	-	(¹)
Data not available	(¹)	-	(¹)	-	(¹)	-	-	-	-

¹ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 26. Sickness and accident insurance: Percent of full-time participants with benefits based on percent of earnings formula by maximum weekly benefit, medium and large firms, 1988

Type of payment	Total	Maximum weekly benefit											No maximum
		Total with maximum	Less than \$100	\$100 to \$119	\$120 to \$139	\$140 to \$159	\$160 to \$199	\$200 to \$249	\$250 to \$299	\$300 to \$349	\$350 to \$399	\$400 or more	
All participants													
Total	100	70	(1)	3	2	29	1	15	6	4	2	9	30
Fixed percent of earnings	92	68	(1)	3	2	29	1	15	6	4	1	8	23
Less than 50	1	-	-	-	-	-	-	-	-	-	-	-	1
50	36	31	(1)	1	1	25	(1)	1	1	(1)	1	1	5
55	(1)	(1)	-	-	-	-	-	(1)	-	(1)	-	(1)	(1)
60	23	15	(1)	(1)	1	1	(1)	1	4	2	1	4	8
62	(1)	-	-	-	-	-	-	-	-	-	-	-	(1)
65	1	1	-	-	-	(1)	(1)	-	-	(1)	-	(1)	1
66	1	(1)	-	-	(1)	-	-	-	-	-	-	(1)	(1)
67	22	19	(1)	1	(1)	2	(1)	11	(1)	1	(1)	1	4
70	3	2	-	(1)	-	(1)	(1)	(1)	(1)	-	(1)	1	2
75	4	1	-	-	-	(1)	(1)	(1)	(1)	-	(1)	1	2
80	1	(1)	-	-	-	1	-	(1)	-	-	-	(1)	3
Over 80	(1)	-	-	-	(1)	-	-	-	(1)	-	-	(1)	1
Percent of earnings varies	8	2	-	-	-	-	(1)	(1)	-	(1)	(1)	1	7
Professional and administrative													
Total	100	68	(1)	1	1	29	1	13	5	5	2	11	32
Fixed percent of earnings	89	66	(1)	1	1	29	1	12	5	5	2	10	23
Less than 50	1	-	-	-	-	-	-	-	-	-	-	-	1
50	36	30	(1)	(1)	(1)	26	(1)	(1)	(1)	(1)	1	2	6
55	(1)	(1)	-	-	-	-	-	(1)	-	-	-	-	-
60	22	15	(1)	(1)	(1)	(1)	(1)	1	4	4	1	5	7
62	(1)	-	-	-	-	-	-	-	-	-	-	-	(1)
65	2	1	-	-	-	-	-	-	-	-	-	-	(1)
66	(1)	(1)	-	-	(1)	-	-	-	-	-	-	(1)	1
67	19	15	(1)	(1)	(1)	1	(1)	10	1	1	(1)	2	(1)
70	4	2	-	(1)	-	(1)	(1)	10	1	1	(1)	2	3
75	5	2	-	(1)	-	(1)	(1)	(1)	-	-	(1)	1	2
80	1	(1)	-	-	-	2	-	(1)	-	-	-	-	3
Over 80	(1)	-	-	-	-	-	-	-	-	-	-	(1)	1
Percent of earnings varies	11	2	-	-	-	-	(1)	(1)	-	-	(1)	1	9
Technical and clerical													
Total	100	68	(1)	1	2	33	1	11	4	4	2	10	32
Fixed percent of earnings	87	66	(1)	1	2	33	1	11	4	4	1	8	21
Less than 50	1	-	-	-	-	-	-	-	-	-	-	-	1
50	40	34	(1)	(1)	(1)	31	(1)	(1)	(1)	(1)	(1)	1	5
55	(1)	(1)	-	-	-	-	-	(1)	-	(1)	-	-	-
60	19	13	-	(1)	(1)	(1)	(1)	1	3	2	(1)	5	6
62	(1)	-	-	-	-	-	-	-	-	-	-	-	(1)
65	1	1	-	-	-	(1)	(1)	-	-	-	-	-	(1)
66	(1)	(1)	-	-	(1)	-	(1)	-	-	(1)	-	(1)	1
67	18	15	(1)	(1)	(1)	1	1	9	(1)	1	(1)	1	3
70	2	1	-	(1)	-	(1)	(1)	(1)	(1)	-	(1)	1	1
75	3	1	-	-	-	1	-	(1)	-	-	-	(1)	2
80	2	(1)	-	-	(1)	-	-	-	-	-	-	-	1
Percent of earnings varies	13	3	-	-	-	-	-	(1)	-	(1)	(1)	2	11

See footnotes at end of table.

Table 26. Sickness and accident insurance: Percent of full-time participants with benefits based on percent of earnings formula by maximum weekly benefit, medium and large firms, 1988—Continued

Type of payment	Total	Maximum weekly benefit											No maximum
		Total with maximum	Less than \$100	\$100 to \$119	\$120 to \$139	\$140 to \$159	\$160 to \$199	\$200 to \$249	\$250 to \$299	\$300 to \$349	\$350 to \$399	\$400 or more	
Production and service													
Total	100	72	1	4	3	26	1	18	7	3	1	7	28
Fixed percent of earnings	96	71	1	4	3	26	1	18	7	3	1	7	24
Less than 50	(¹)	-	-	-	-	-	-	-	-	-	-	-	(¹)
50	34	30	(¹)	2	1	21	(¹)	2	1	(¹)	1	1	5
55	1	(¹)	-	-	-	-	-	(¹)	-	(¹)	-	(¹)	(¹)
60	25	16	(¹)	(¹)	1	2	(¹)	2	5	1	(¹)	4	9
62	(¹)	-	-	-	-	-	-	-	-	-	-	-	(¹)
65	1	1	-	-	-	(¹)	-	-	-	(¹)	-	1	1
66	1	1	-	-	1	-	-	-	-	-	-	-	(¹)
67	25	21	-	1	1	2	(¹)	13	(¹)	1	(¹)	1	4
70	4	2	-	1	-	(¹)	(¹)	1	(¹)	-	(¹)	(¹)	2
75	3	1	-	-	-	1	-	(¹)	-	-	-	(¹)	3
80	1	(¹)	-	-	-	-	-	-	(¹)	-	-	-	(¹)
Percent of earnings varies	4	1	-	-	-	-	(¹)	1	-	-	(¹)	(¹)	4

¹ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 27. Sickness and accident insurance: Percent of full-time participants by length-of-service requirements for participation,¹ medium and large firms, 1988

Length-of-service requirement	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
With service requirement	76	70	77	76
1 month	26	30	32	23
2 months	7	5	4	8
3 months	23	18	24	24
4-5 months	10	8	8	11
6 months	6	6	4	6
1 year	3	3	5	3
Over 1 year	1	(²)	1	1
Without service requirement	24	29	23	23
Service requirement not determinable	(²)	(²)	(²)	(²)

¹ Length of time employees must be on the job before they are covered by a plan that is at least partially employer financed. There is frequently an administrative time lag between completion of the requirement and the actual start of participation. If the lag was 1 month or more, it was included in the service requirement. Minimum age requirements are rare.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 28. Long-term disability insurance: Percent of full-time participants by method of determining payment, medium and large firms, 1988

Method	Total	With maximum coverage provisions	Type of maximum coverage provision			Without maximum coverage provisions
			Plan maximum only ¹	Disability income maximum only ²	Plan and disability income maximum	
All participants						
All methods	100	81	48	12	21	19
Fixed percent of earnings	83	71	42	9	20	12
Less than 50	1	1	1	(³)	-	(³)
50	21	17	6	5	5	4
55	(³)	(³)	-	(³)	-	(³)
60	47	40	25	2	12	7
65 or 67	13	12	9	1	2	1
70 or more	1	1	1	-	(³)	(³)
Percent varies by earnings	8	4	3	1	1	3
Percent varies by service	3	2	2	-	(³)	(³)
Scheduled dollar amount varies by earnings	3	(³)	(³)	-	-	3
Other ⁴	3	3	1	2	(³)	1
Professional and administrative						
All methods	100	81	48	11	22	19
Fixed percent of earnings	87	72	45	7	21	15
Less than 50	1	1	(³)	(³)	-	(³)
50	18	13	5	3	5	5
60	53	45	28	3	14	8
65 or 67	13	12	9	1	2	1
70 or more	2	2	1	-	(³)	(³)
Percent varies by earnings	8	4	2	1	1	3
Percent varies by service	(³)	(³)	(³)	-	(³)	(³)
Scheduled dollar amount varies by earnings	(³)	-	-	-	-	(³)
Other ⁴	5	4	1	3	(³)	1
Technical and clerical						
All methods	100	84	49	12	23	16
Fixed percent of earnings	87	76	45	9	22	11
Less than 50	1	1	1	(³)	-	(³)
50	21	18	5	6	7	3
55	(³)	(³)	-	(³)	-	(³)
60	49	43	28	2	13	7
65 or 67	14	13	11	1	2	1
70 or more	1	1	1	-	(³)	(³)
Percent varies by earnings	9	5	3	1	1	4
Percent varies by service	2	1	1	-	(³)	1
Scheduled dollar amount varies by earnings	(³)	-	-	-	-	(³)
Other ⁴	3	2	(³)	2	-	1
Production and service						
All methods	100	76	46	13	17	24
Fixed percent of earnings	72	62	35	12	16	9

See footnotes at end of table.

Table 28. Long-term disability insurance: Percent of full-time participants by method of determining payment, medium and large firms, 1988—Continued

Method	Total	With maximum coverage provisions	Type of maximum coverage provision			Without maximum coverage provisions
			Plan maximum only ¹	Disability income maximum only ²	Plan and disability income maximum	
Production and service						
Less than 50	1	1	(³)	1	-	(³)
50	25	21	8	9	4	4
55	(³)	(³)	-	(³)	-	-
60	33	29	17	2	9	4
65 or 67	11	10	8	(³)	2	1
70 or more	1	1	1	-	(³)	(³)
Percent varies by earnings	6	4	3	(³)	1	3
Percent varies by service	7	7	7	-	(³)	(³)
Scheduled dollar amount varies by earnings	12	(³)	(³)	-	-	12
Other ⁴	3	2	1	1	(³)	(³)

¹ Includes flat dollar maximums and dollar maximums that vary by years of service.

² Includes ceilings on income during disability that limit the total amount payable from the long-term disability insurance plus other income, such as dependent Social Security and rehabilitative employment income.

³ Less than 0.5 percent.

⁴ Includes flat dollar amounts and scheduled percent of earnings varying by length of disability.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 29. Long-term disability insurance: Percent of full-time participants with benefits based on percent of earnings formula by maximum monthly benefit, medium and large firms, 1988

Type of payment	Total	Total with maximum ¹	Maximum monthly benefit									Other maximum ²	No maximum payment
			\$1500 or less	\$1501 to \$2000	\$2001 to \$2500	\$2501 to \$3000	\$3001 to \$3500	\$3501 to \$4000	\$4001 to \$5000	\$5001 to \$7500	\$7501 or more		
All participants													
Total	100	71	5	3	4	13	4	4	19	8	10	2	29
Fixed percent of earnings	86	64	5	3	3	13	3	4	18	7	9	-	22
Less than 50	1	1	(¹)	-	-	-	-	-	(¹)	-	(¹)	-	1
50	22	12	2	1	1	2	1	1	2	1	2	-	10
55	(¹)	-	-	-	-	-	-	-	-	-	-	-	(¹)
60	48	39	1	2	2	9	2	2	12	4	5	-	9
65 or 67	13	12	1	(¹)	(¹)	2	(¹)	(¹)	4	2	2	-	1
70 or more	1	1	(¹)	-	-	(¹)	(¹)	-	(¹)	(¹)	(¹)	-	(¹)
Percent varies by earnings	8	4	(¹)	-	(¹)	(¹)	1	(¹)	(¹)	1	1	-	4
Percent varies by service	3	2	-	-	-	(¹)	-	-	1	-	-	2	(¹)
Percent varies during disability	3	(¹)	-	-	(¹)	(¹)	-	-	(¹)	-	(¹)	-	3
Professional and administrative													
Total	100	70	5	3	4	14	4	4	18	8	11	-	30
Fixed percent of earnings	87	65	4	3	4	14	3	4	17	7	9	-	22
Less than 50	1	(¹)	(¹)	-	-	-	-	-	(¹)	-	(¹)	-	1
50	18	10	1	1	1	2	1	1	1	1	2	-	8
60	53	42	2	3	3	9	1	3	12	4	5	-	11
65 or 67	13	11	1	(¹)	(¹)	2	(¹)	(¹)	3	1	2	-	2
70 or more	2	2	(¹)	-	-	(¹)	(¹)	-	(¹)	(¹)	(¹)	-	(¹)
Percent varies by earnings	8	4	(¹)	-	(¹)	(¹)	1	(¹)	(¹)	1	1	-	4
Percent varies by service	(¹)	(¹)	-	-	-	(¹)	-	-	(¹)	-	-	-	(¹)
Percent varies during disability	5	1	-	-	(¹)	(¹)	-	-	(¹)	-	(¹)	-	4
Technical and clerical													
Total	100	72	4	2	3	15	4	5	17	8	14	(¹)	28
Fixed percent of earnings	87	67	4	2	3	15	3	5	16	7	12	-	20
Less than 50	1	1	(¹)	-	-	-	-	-	(¹)	-	(¹)	-	1
50	21	12	1	1	1	2	1	1	2	1	3	-	9
55	(¹)	-	-	-	-	-	-	-	-	-	-	-	(¹)
60	50	41	1	1	2	10	2	3	10	4	7	-	9
65 or 67	14	13	2	(¹)	(¹)	2	(¹)	1	3	2	2	-	2
70 or more	1	1	(¹)	-	-	(¹)	(¹)	-	(¹)	(¹)	(¹)	-	(¹)
Percent varies by earnings	9	4	(¹)	-	(¹)	(¹)	(¹)	(¹)	(¹)	1	1	-	4
Percent varies by service	2	1	-	-	-	(¹)	-	-	1	-	-	(¹)	1
Percent varies during disability	2	(¹)	-	-	-	-	-	-	(¹)	-	-	-	2

See footnotes at end of table.

Table 29. Long-term disability insurance: Percent of full-time participants with benefits based on percent of earnings formula by maximum monthly benefit, medium and large firms, 1988—Continued

Formula by maximum monthly benefit, medium and large firms, 1966 - Continued													
Type of payment	Total	Total with maximum ¹	Maximum monthly benefit									Other maximum ²	No maximum payment
			\$1500 or less	\$1501 to \$2000	\$2001 to \$2500	\$2501 to \$3000	\$3001 to \$3500	\$3501 to \$4000	\$4001 to \$5000	\$5001 to \$7500	\$7501 or more		
Production and service													
Total	100	71	6	5	3	9	3	5	22	6	5	7	29
Fixed percent of earnings	83	59	6	5	2	9	2	4	20	6	5	-	24
Less than 50	1	(¹)	(¹)	-	-	-	-	-	(¹)	-	(¹)	-	1
50	29	15	4	2	(¹)	1	(¹)	2	1	(¹)	2	-	14
55	(¹)	-	-	-	-	-	-	-	-	-	-	-	(¹)
60	38	31	1	2	2	6	1	1	13	2	1	-	8
65 or 67	13	12	1	(¹)	-	1	-	(¹)	5	3	2	-	1
70 or more	1	1	(¹)	-	-	1	-	-	(¹)	(¹)	(¹)	-	(¹)
Percent varies by earnings	7	4	(¹)	-	1	(¹)	1	1	(¹)	1	(¹)	-	3
Percent varies by service	8	8	-	-	-	(¹)	-	-	1	-	-	7	(¹)
Percent varies during disability	2	(¹)	-	-	-	-	-	-	(¹)	-	-	-	1

¹ Maximum payment from plan before offsets are deducted. Offsets usually include other employee income received during disability, such as Workers' Compensation, Social Security, and State nonoccupational income benefits. Excludes disability income maximum provisions, which do not restrict LTD payments unless the level of income guaranteed by the plan plus other nonoffsetting income exceeds

specified percentages of predisability earnings or flat dollar amounts.

² Includes maximums that vary with years of service.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 30. Long-term disability insurance: Percent of full-time participants with maximum disability income provisions¹ by type and amount of maximum, medium and large firms, 1988

Disability income maximum	All participants	Professional and administrative participants	Technical and clerical participants
Total	100	100	100
Fixed percent of earnings	96	97	96
Less than 70	7	6	5
70	38	42	37
75	25	17	28
80	10	12	9
Over 80	16	19	16
Percent varies by employee's earnings	3	3	3
Flat dollar amount	(¹)	(¹)	(¹)
Not determinable	(¹)	(¹)	(¹)

¹ Ceilings on income during disability that limit the total amount payable from the long-term disability insurance and other income.

² Less than 0.5 percent.

NOTE: Data were insufficient to show production-service participants separately. Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 31. Long-term disability insurance: Percent of full-time participants by benefit waiting period,¹ medium and large firms, 1988

Length of waiting period	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Less than 3 months	2	2	2	1
3 months	18	21	19	14
4-5 months	5	5	6	3
6 months	46	47	46	42
7-11 months	1	1	1	(²)
1 year or more	5	4	6	6
Varies by duration of short-term disability benefits ³	24	21	20	33
Not determinable	(²)	(²)	(²)	1

¹ Length of time between onset of disability and beginning of LTD payments.

² Less than 0.5 percent.

³ Benefits commence after expiration of paid sick leave and/or

sickness and accident insurance benefits.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 32. Long-term disability insurance: Percent of full-time participants by duration of benefits, medium and large firms, 1988

Duration	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
For life	1	1	1	2
To retirement age	12	13	10	12
Specified number of months	2	2	1	3
Varies by age when disability occurs ¹	83	82	85	81
One time reduction	27	24	23	35
Gradual reduction	56	58	62	46
Varies by type of disability ²	(²)	(²)	(²)	-
Varies by length of service	2	2	1	3
Data not available	(²)	(²)	(²)	(²)

¹ Under the Age Discrimination in Employment Act, age-based reductions in employee benefit plans are permissible when justified by significant cost considerations. The duration of benefits may be reduced gradually according to an age schedule or reduced once at a specified age.

² Benefits for disabilities caused by accidents were usually paid for life; duration for illnesses was limited.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 33. Long-term disability insurance: Percent of full-time participants by length-of-service requirements for participation,¹ medium and large firms, 1968

Length-of-service requirement	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
With service requirement	61	59	62	65
1 month	11	12	9	11
2 months	4	3	3	5
3 months	15	15	18	13
4-5 months	1	(¹)	(¹)	2
6 months	9	6	9	11
7-11 months	(¹)	(¹)	(¹)	(¹)
1 year	15	14	16	14
2 years	2	2	2	3
3 years	1	1	1	1
Over 3 years	4	3	3	4
Without service requirement	38	40	37	35
Service requirement not determinable	1	1	1	(¹)

¹ Length of time employees must be on the job before they are covered by a plan that is at least partially employer financed. There is frequently an administrative time lag between completion of the requirement and the actual start of participation. If the lag was 1 month or more, it was included in the service requirement.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 34. Long-term disability insurance: Percent of full-time participants in plans with limitations on benefits for mental illness, medium and large firms, 1968

Limitation	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Without limits	58	57	55	64
Benefits limited	41	43	44	35
Benefits provided only if institutionalized	1	2	1	1
Unless institutionalized, benefits provided only for limited period				
12 months	35	37	38	30
24 months	2	2	2	2
Other	33	35	35	27
In all instances, benefits provided only for limited period				
24 months	1	(¹)	1	1
Other	4	4	5	4
Data not available	4	4	5	3
	(¹)	(¹)	(¹)	1

¹ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Chapter 5. Health Care and Life Insurance

Health care and life insurance, along with paid leave, are the most widespread employee benefits in medium and large firms. Health care benefits were provided to 90 percent and life insurance to 92 percent of all full-time employees. The extent of coverage was nearly identical within each of the three occupational groups.

Health Care

This section presents many details of health care benefits, including how frequently particular medical services were covered and the extent to which coverage was complete or limited. Other features examined are: Financing arrangements, cost containment features, employee contributions to plan premiums, requirements for plan participation, and coverage for retired or laid-off workers.

Summary of coverage

Virtually all of the participants in health care plans had coverage for the major categories of medical care, such as hospital room and board, care by physicians and surgeons, X-ray and laboratory services, out-of-hospital prescription drugs, and private duty nursing (table 35). With few exceptions, coverage included both physical and mental health conditions. In addition, 66 percent of participants received dental coverage.

Lower cost alternatives to hospital care were also significant. More than three out of four medical plan participants had provisions covering home health care and extended care facilities. Hospice care, for the terminally ill, was available to three out of eight medical plan participants.

Among benefits less commonly provided were vision care (covering 35 percent of the participants), hearing care (27 percent), and routine physical exams (28 percent).

Funding arrangements

In 1988, 75 percent of all health plan participants were covered by a fee-for-service medical plan (table 36). These plans pay for specific medical procedures as expenses are incurred. Arrangements for financing plan benefits varied widely: 42 percent of fee-for-service participants were in self-insured plans (where the plan sponsor bore the financial risk for making plan payments), compared to 34 percent in

commercially insured plans and 18 percent in Blue Cross-Blue Shield plans. The remainder generally had combined sources of benefits. An increased incidence of self-insured plans has been observed in recent years. Reasons for this may include reduced administrative costs for self-insurance, and the fact that some States charge a premium tax for insured plans.(chart 1)⁵

Health maintenance organizations (HMO's) covered 19 percent of health care participants in the survey, up from 13 percent in 1986 and 7 percent in 1985. HMO's are prepaid health care plans that provide comprehensive medical services to enrolled members for a fixed fee.⁶ HMO's are classified in this survey as either group/staff, with services provided in central facilities, or individual practice association (IPA), with providers working from their own offices. Group/staff plans enrolled 37 percent of HMO participants; IPA, 55 percent; and a combination of the two, 7 percent.

Preferred provider organizations (PPO's) covered 7 percent of medical care participants in 1988, up from only 1 percent in 1986. PPO plans pay a higher benefit for services rendered by designated health care providers (such as hospitals, physicians, and dentists), although participants are free to choose any provider.⁷

Dental plans studied in the survey were almost entirely fee-for-service plans. Self-insured and commercially insured plans accounted for nearly all of the fee-for-service participants; 5 percent received dental benefits through a dental HMO.

Almost three-fifths of participants with vision care received benefits through a fee-for-service plan, while two-fifths were financed through a vision HMO.

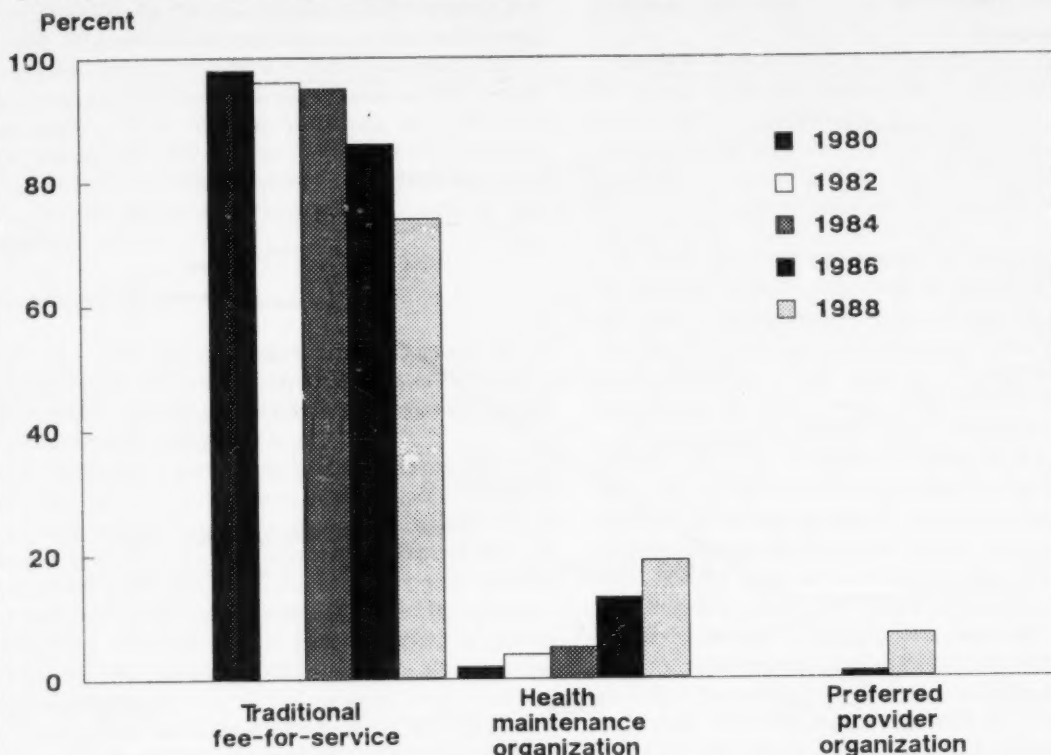
As noted above, financing arrangements varied by type of plan. But taking into account all medical, dental, and vision benefits, 43 percent of health care plan participants had at least some coverage through employer self-insured benefits.

⁵ For more information on the rise in self-insured health care, see "Self Funding of the Health Plan: Why Employers Assume Risk," *Spencer's Research Reports*, March 1985, pp. 331.54. -1 -2.

⁶ Health maintenance organization plans and plans provided through the more traditional health insurers are compared by Allan Blustein and William Marclay in "HMO's and Other Health Plans: Coverage and Employee Premiums," *Monthly Labor Review*, June 1983, pp. 28-33.

⁷ One additional health care funding arrangement, exclusive provider organizations, was available to a small number of survey participants. An exclusive provider organization is a group of hospitals and physicians that contracts to provide comprehensive medical services. Participants are required to obtain services from members of the organization in order to receive plan benefits.

Chart 1. Type of fee arrangement: Percent of full-time participants in medical plans, medium and large firms, 1980-88



Payment arrangements

Plan provisions were examined to determine the extent of coverage for each type of medical service (table 35). In this survey, each category of medical care is classified under one of four payment arrangements: Full coverage, coverage with internal limitations only, coverage with overall limitations only, or coverage with internal and overall limitations.

Care was considered to be covered in full if there were no restrictions on the number of days of care, no dollar maximums on benefits, and no required payments by the covered individual. Such full coverage was most common among HMO plans.⁸

Internal limitations restrict the level of coverage for a particular type of medical service, independent of other plan provisions. An example of internal limits is a maximum of 45 days of hospitalization per year for mental health care in a plan providing 365 days for other illnesses.

An overall limitation, in contrast to internal limitations,

is a deductible, coinsurance requirement, maximum benefit level, or other provision that applies to many, if not all, types of medical care provided under the health plan. Examples of overall limits include a requirement that the employee pay the first \$150 of expenses in a year, regardless of the source of the expense, before the plan will begin payments (deductible); a requirement that the employee pay 20 percent of covered expenses beyond the deductible (coinsurance); and a lifetime ceiling on plan payments of \$1 million (maximum). Plans often apply overall limits to protect against high risks posed by a small proportion of participants.

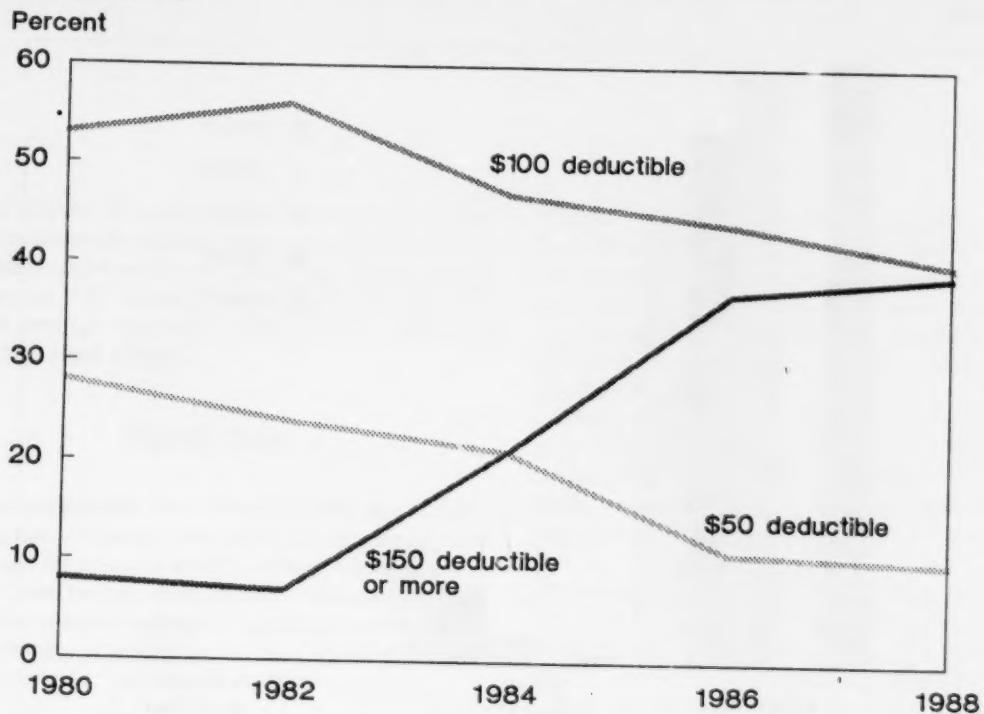
Internal and overall limitations may apply to the same category of care. An example of this is an internal limit of 120 days of fully paid hospital room and board coverage, with protection beyond that point subject to overall plan coinsurance rates and maximum dollar limitations.

Overall limitations

Nearly all categories of medical care were likely to be subject to overall limitations on plan benefits (tables 37-40). For several categories—such as visits to the physician's office, private duty nursing care, and out-of-hospital pre-

⁸ When a benefit is covered in full, all expenses up to the usual, reasonable, and customary charges, or the prevailing hospital semiprivate rate, are borne by the plan.

Chart 2. Trends in selected deductible amounts: Percent of full-time participants in medical plans with deductibles, medium and large firms, 1980-88



scription drugs—overall limitations were usually the only type applied.

Plans with overall limitations nearly always require a participant to meet a specified deductible before eligibility for benefit payments. This approach is designed to discourage unnecessary use of medical services. Ninety percent of the participants in plans with overall limitations were subject to an annual flat-dollar deductible. Of these participants, however, 16 percent were in plans where the deductible did not apply to hospital room and board expenses (chart 2).

While \$100 was the most common individual annual deductible, accounting for four-tenths of the participants subject to overall limits, deductibles of \$150 and \$200 were also prevalent. The average annual deductible was \$153 for all workers. White-collar workers with overall limitations on their medical care were required to meet an average annual deductible that was nearly \$30 higher than the \$138 average annual deductible for blue-collar workers.

When a medical care plan covered an employee and family, a family deductible was often imposed in addition to individual deductibles. After the family deductible is met, no additional individual deductibles apply during that year. Four out of five participants in plans with overall limitations

imposed both individual and family deductibles. Most commonly, family deductibles were equal to two or three times the individual deductibles.

Once the deductible has been met, the plan almost always pays a specified percentage (coinsurance) of covered expenses (usually 80 percent), with the employee paying the remainder. Just over four-fifths of participants subject to overall limitations were in plans where the coinsurance increased to 100 percent after the individual paid out a specified dollar amount for covered expenses (maximum out-of-pocket expense). Nearly 7 out of 10 participants with overall limits had an annual individual out-of-pocket expense maximum of less than \$1,250, in addition to the deductible. Maximum out-of-pocket ceilings were also specified for family expenses in plans covering 38 percent of participants with overall limitations. The annual maximum for out-of-pocket expenses averaged \$957 for an individual and \$2,004 for the family.

Plans that required an annual deductible and placed a maximum on out-of-pocket expenses covered 78 percent of the participants subject to overall limitations. The sum of these two items represents the total that an individual would have to pay for covered medical expenses in a calendar year.

In 1988, the annual deductible plus the annual out-of-pocket expense maximum averaged \$1,055 per individual.⁹

Plans with overall limitations often placed a ceiling on the amount payable by the plan, usually a lifetime maximum. In 1988, 70 percent of the participants in plans with overall limitations were affected by a lifetime maximum only. A maximum of \$1 million applied to more than one-half of these participants. Other common maximum amounts were \$250,000 and \$500,000, with the average just over \$760,000. Of the participants subject to overall limitations, 23 percent were in plans that did not impose a maximum on plan payments.

Hospital coverage

Hospital expenses constitute about 40 percent of all personal health care costs in the United States.¹⁰ Virtually all health plan participants had benefit provisions for hospital room and board charges (table 41).¹¹

For 34 percent of participants in plans with hospital room and board coverage, expenses were not subject to a limit on days or an internal or overall maximum dollar amount. Of these, nearly three-fourths were reimbursed for the full semiprivate room rate, while the remainder were allowed a percentage of the semiprivate room rate. By using the semiprivate room rate as a basis for plan payments, participants are afforded some protection against rising hospital charges.

The remaining participants were in plans that limited room and board coverage by imposing either an internal or overall dollar maximum (39 percent), a limit on days of coverage (6 percent), or limits on both dollars and days (21 percent). Plans with overall dollar limitations generally based benefits on a percentage of the semiprivate room rate. Conversely, most enrollees with limits on days of coverage, or with both dollar and day limits, usually were granted the full semiprivate room rate for a limited period, followed by a percentage of the semiprivate room rate.

Over the last 2 years, there has been a significant decrease in the number of health plan participants subject to limits on the days of hospital room and board coverage. In 1986, 58 percent of participants had some restriction on the number of hospital days covered, while in 1988 only 27 percent had similar restrictions. The growth of HMO's and plans providing comprehensive medical benefits subject only to overall limitations accounts in part for this sharp decline.

Separate deductibles for hospital admissions had to be met by 9 percent of medical care participants. Deductibles normally came in the form of a specified dollar amount (such

as \$150 per admission), although some plans required participants to pay for the first day of hospitalization.

Surgical coverage

Nearly all participants were in medical plans with payments for in-hospital surgery based on the "usual, customary, and reasonable" (UCR) charges for the type of operation performed (tables 42-43).¹² Although the most common provision was for a plan to pay 80 percent of the UCR charges, over one-third of participants had the full UCR charges paid.

Payment of full UCR charges for in-hospital surgery dropped significantly from 1986 to 1988, from 54 percent to 35 percent of participants. This is largely due to a growing tendency of plans to cover a variety of benefits, including surgery, under overall payment limitations, including deductibles and coinsurance, rather than in full.

When in-hospital surgery was not based on UCR charges, such benefits were covered by a schedule of payments that listed the maximum amount payable for each procedure. Charges exceeding the scheduled amount, however, were usually covered, subject to overall plan limitations. Almost three-fifths of all participants in plans with surgical coverage were subject to a deductible for in-hospital surgical procedures.

For 70 percent of participants, outpatient surgery was covered in the same manner as in-hospital surgery, whether in full, a percent of UCR charges, or under a schedule of payments. The remaining 30 percent of participants had different coverage for outpatient surgery, frequently a higher percent of charges paid. By providing such an incentive to seek outpatient surgery, medical plans are attempting to reduce the number of hospital stays and lower the cost of care.

Second surgical opinion provisions covered nearly three-fifths of participants with surgical coverage. Three-fifths of these participants were in plans that provided incentives for seeking second opinions, usually applying only to selected procedures. The most common incentive was to reduce the reimbursement rate if a second opinion was not obtained. For example, a plan might pay 80 percent of surgical charges if a second opinion is received, but only 60 percent otherwise.

The medical care plans examined in the 1988 survey treated maternity charges like other surgical charges. However, 17 percent of the participants were in plans that included incentives for deliveries in lower cost birthing centers, rather than in hospitals. One-fifth of the participants were in plans that did not provide maternity coverage for dependent children, except where complications from pregnancy developed.

Mental health coverage

Mental health coverage, although available to nearly all

⁹ This average differs slightly from the sum of the individual averages because some participants have only an annual deductible or only an annual maximum out-of-pocket expense limitation. The average includes only those participants with both provisions.

¹⁰ Katherine R. Levin and Mark S. Freeland, "National Medical Care Spending," *Health Affairs*, Winter 1988, pp 124-136.

¹¹ A small number of participants, who elected only dental care coverage, were not covered for hospital expenses.

¹² The usual, customary, and reasonable charge is a fee that is: Not more than the physician's usual charge; within the customary range of fees in the locality; and is reasonable, considering medical circumstances.

participants, was commonly subject to special limitations (table 44). Seventy-one percent of participants in plans with mental health benefits had more restrictive hospital coverage for mental illness than for other ailments in 1988; this was up from 61 percent in 1986 and from 43 percent in 1982. Plans commonly limited the duration of hospital stays, often to 30 or 60 days per year for mental health care, compared to 120, 365, or unlimited days for other illnesses; and sometimes they imposed a separate, lower, maximum on covered hospital expenses, such as a lifetime maximum of \$50,000 on all mental health benefits.

Even more restrictive was coverage for mental health care outside the hospital (psychiatric office visits). Special limits affected 95 percent of participants in 1988, up from 91 percent in 1986 and 84 percent in 1982. Outpatient mental health care was commonly covered for fewer visits per year than other outpatient services, subject to special maximum dollar limits on annual payments, and covered at a coinsurance rate of 50 percent rather than the usual 80 percent paid by the plan for other illnesses. Also, outpatient mental health care expenses often did not count toward the maximum out-of-pocket expense limitation, and the reimbursement for these expenses did not increase to 100 percent if the out-of-pocket expense limitation was met.¹³

Alcohol and drug abuse treatment

Alcohol and drug abuse treatment benefits covered 80 and 74 percent of health care participants, respectively (tables 45-46). Treatment provided under substance abuse care included detoxification and rehabilitation. Detoxification provides care under the supervision of medical personnel to reduce or eliminate the physical effects of alcohol and drug abuse. Rehabilitation is designed to provide a variety of services intended to alter abusive behavior. Such services are generally provided once detoxification has been completed.

Ninety-five percent of all participants with some form of alcohol abuse benefits were covered for inpatient detoxification, and 78 percent for inpatient rehabilitation. Detoxification is generally considered medically necessary; thus, nearly all plans that provide alcohol abuse treatment benefits cover it. There is a greater tendency to exclude inpatient rehabilitation, since it requires less constant, immediate care. Outpatient alcohol abuse treatment, generally rehabilitative care, was available to 84 percent of participants with alcoholism coverage. Coverage patterns are similar for drug abuse benefits.

As is true for mental health care, plans were more restrictive in covering substance abuse treatment than other illnesses. It was more likely, however, for inpatient detoxification to be treated the same as other conditions than

inpatient rehabilitation or outpatient care. Slightly more than two-thirds of the participants with inpatient alcohol detoxification care had their coverage either subject to separate limitations or to the same limitations as for mental illnesses. This contrasts with inpatient rehabilitation and outpatient care, where about four-fifths of participants had their coverage subject to separate limitations or covered the same as mental health care.

Separate limitations for substance abuse treatment most commonly included restrictions on the number of days of inpatient hospital care per year, the number of outpatient visits per year, and maximum dollar amounts of benefits per year or per lifetime. Limitations on days and dollars were often combined for alcohol and drug abuse care. A typical limitation on inpatient care was 30 days per year. Similarly, outpatient care might be restricted to 20 or 30 visits per year.

Dental coverage

Dental expenses were covered for 60 percent of employees (tables 47-51). Nearly all dental plans covered both preventive services, such as examinations and X-rays, and restorative procedures, such as fillings, periodontal care, endodontic care, prosthetics, and crowns.¹⁴ Plans covering orthodontic expenses, at least for dependent children, covered 69 percent of employees with dental benefits in 1988.

Dental payments were most commonly based on a percentage of the usual, customary, and reasonable charge for a procedure. The percentage covered by a plan generally depended on the type of procedure performed. Less costly procedures such as examinations and X-rays were usually covered at 80 or 100 percent. Fillings, surgery, endodontics, and periodontics were more likely to be covered at 80 percent. More expensive procedures—inlays, crowns, prosthetics, and orthodontia—were often covered at 50 percent of the usual, customary, and reasonable charge.

About one-fifth of dental plan participants were offered reimbursement based on a schedule of cash allowances for restorative services, such as fillings, crowns, and endodontics. In this type of arrangement, each procedure is subject to a specified maximum dollar amount that can be paid to the participant or dentist. Preventive procedures and orthodontia were less likely to be subject to this type of schedule.

Two percent of dental plan participants had services covered by an incentive schedule. Under this arrangement, the percentage of dental expenses paid by the plan increases each year if the participant is examined regularly by a dentist. A small number of participants were in plans requiring a copayment, after which benefits were paid in full. Copayments were commonly \$5 or \$10 per procedure for preventive care, while higher copayments often applied to major dental services.

¹³ A detailed examination of mental health care provisions in private health care plans is provided by Allan P. Blostin in "Mental Health Benefits Financed By Employers," *Monthly Labor Review*, July 1987, pp. 23-27.

¹⁴ Periodontal care is the treatment of tissues and bones supporting the teeth. Endodontics involves the treatment of the tooth pulp, such as root canal work. Prosthetics deals with the construction and fitting of bridges and dentures.

Two-thirds of dental participants were in plans that specified a deductible amount before any benefits were paid by the plan. The most common requirement was a \$25 or \$50 deductible each year. However, some plans required the participant to pay a deductible (usually \$50) only once while a member of the plan rather than every year. White-collar workers were more likely than blue-collar workers to have plans with deductible requirements.

Plans that limited the amount of payment each year by specifying an annual maximum benefit covered 87 percent of dental plan participants. The most common limit was \$1,000 per year. Orthodontic services were almost always subject to separate lifetime maximums, commonly \$750 or \$1,000. In 1988, the average lifetime maximum for orthodontia was \$965.

Two-thirds of the dental participants were in plans with preauthorization clauses. This cost containment technique requires participants to obtain authorization from the plan before undergoing expensive treatment. Commonly, procedures costing more than \$100 or \$200 were subject to advance authorization.¹⁵

Vision care

One out of three health care plan participants had vision care coverage (table 52). All vision plan participants had coverage for eye examinations, while two-thirds had coverage for eyeglasses and almost three-fifths for contact lenses. Blue-collar participants were more likely than white-collar participants to receive benefits for eyeglasses and contact lenses.

Practically all the limitations on vision care benefits were internal, such as scheduled dollar allowances, coinsurance, and copayments that were applicable only to vision care services. Examinations were either covered in full, subject to a copayment, or subject to a scheduled dollar allowance; reimbursement for eyewear was typically limited by a scheduled dollar allowance.¹⁶

Other health benefits

The survey also measured the incidence of several other services provided through medical care plans (table 53). For example, 28 percent of medical care participants were in plans providing at least some of the cost for routine physical examinations and 20 percent had at least partial coverage for organ transplants. HMO's nearly always included coverage for hearing care, physical examinations, well-baby care, and immunizations and inoculations. The main reason for such a high incidence of these services is that HMO's are

required to include these benefits in order to qualify for favorable treatment under the Health Maintenance Organization Act of 1973, as amended.¹⁷

Cost containment

To help contain costs of health care, a number of plans provided less expensive alternatives to a hospital stay (table 54). Coverage for treatment in an extended care facility was provided to almost 80 percent of the participants in 1988. Home health care coverage rose to 76 percent in 1988, up from 66 percent in 1986. Hospice care for the terminally ill was available to 38 percent of the participants. Hospice coverage was more common among non-HMO plans.

More generous benefit provisions for prehospitalization testing, a means of decreasing the length of hospitalization, covered just over two-fifths of the health plan participants. One-third of the participants were provided full plan coverage for hospital confinement only when the plan certified such stays as necessary.

Other cost containment measures encouraged alternative means of obtaining out-of-hospital prescription drugs. Seven percent of all plan participants received higher reimbursements for mail order drugs, and 10 percent received higher reimbursement for obtaining generic rather than name brand prescription drugs.

Less common cost containment features included incentives to audit hospital bills and limitations on payments for nonemergency weekend hospital admissions. In general, fee-for-service plans and preferred provider organizations were more likely to include all types of cost containment features than were HMO's. The nature of HMO's, with providers closely monitoring treatment and costs, provides inherent cost containment features that make explicit provisions unnecessary.

Health maintenance organizations

The survey tabulated the details of three categories of medical care provided specifically by HMO's—physicians' office visits, out-of-hospital prescription drugs, and extended care (table 55). For physicians' office visits, 54 percent of HMO participants were required to pay a copayment, typically \$3 or \$5 per visit, before treatment was received. In general, HMO's do not limit the number of physicians' visits available. Out-of-hospital prescription drug benefits were available to 83 percent of HMO participants, and nearly all had to pay a copayment per prescription, commonly between \$2 and \$4. Extended care benefits were available to 88 percent of HMO participants, most commonly with a limit on the number of days for which care was available.

¹⁵ For more details on dental care benefits, see Rita S. Jain, "Employer-sponsored Dental Insurance Eases the Pain," *Monthly Labor Review*, October 1988, pp. 18-23.

¹⁶ Vision care benefits are discussed in detail in Rita S. Jain, "Employer-sponsored Vision Care Brought into Focus," *Monthly Labor Review*, September 1988, pp. 19-23.

¹⁷ Under the Health Maintenance Organization Act of 1973, as amended, an HMO can be designated "federally qualified" if it provides certain coverage. Under certain circumstances, employers may be required to offer employees medical care coverage under federally qualified HMO's.

Employee contributions

The proportion of employees whose health care premiums were wholly paid by their employers declined to 51 percent in 1988 from 54 percent in 1986 (tables 56-57). Thirty-two percent received fully paid family coverage, a 3-percentage-point drop from 1986. This continued a long-term decline in fully paid health care coverage, which is partly a reaction to the increased cost of medical care. Wholly paid health care for individual and family coverage was available to 72 and 51 percent of employees, respectively, in the 1980 survey.

Exact data on the amount of an employee's contributions for health benefits occasionally were not available because a single payroll deduction applied to both health care and one or more other benefits. However, where the amount was reported, employee premiums for individual and family coverage averaged \$19 and \$60 a month, respectively. Employee premiums for single coverage were slightly higher for production and service workers than for the two white-collar groups, while the opposite was true for family coverage premiums.

Enlarging the survey's scope had no appreciable effect on the reported incidence of medical care plans requiring employee contributions. However, average monthly contributions of old scope participants were about \$1.35 less for single coverage, and about \$8.35 less for family coverage.

Employee health care premiums showed some variation by type of plan. Fifty-nine percent of participants in HMO's were required to contribute for single coverage and 79 percent for family coverage, compared to 41 and 62 percent, respectively, for non-HMO's. The following table shows average monthly single and family contributions for contributory HMO's and non-HMO's:

	Single Coverage	Family Coverage
All participants in contributory HMO's	\$18.70	\$66.64
All participants in contributory non-HMO's	\$19.51	\$58.02

Medical care premiums often included the cost for dental coverage. Where dental plans were provided separately, employee contributions commonly were less than \$5 per month for single coverage and less than \$15 per month for family coverage.

Sixteen percent of employees required to contribute toward their health benefits in 1988 could do so with pretax dollars. These employees had the advantage of reducing their taxable income while buying health care. Some were in flexible benefit plans, in which they could set aside a portion of their salary to purchase additional benefits. These arrangements are described in more detail in chapter 9.

Participation requirements

Coverage was more immediate for health care than for

other insurance plans, vacations, defined benefit pensions, and defined contribution plans (table 58). Two-fifths of health care plan participants were allowed to join a plan immediately upon being hired. For participants required to complete a minimum length of service, the required period was usually 3 months, while 1- or 2-month requirements also were common.

The incidence of service requirements varied widely among the employee groups. While 45 percent of white-collar employees could participate immediately, only 33 percent of blue-collar workers could do so. For 15 percent of participants, the service requirement was not determinable, usually because employers provided documents prepared by a health coverage provider, such as a commercial insurer or Blue Cross-Blue Shield organization, that did not include provisions specific to the sponsoring employer.

Coverage for retired or laid-off workers

Although the Consolidated Omnibus Budget Reconciliation Act of 1985 requires employers to continue health care benefits for employees who are retired, laid off, or otherwise separated from employment, workers may be charged all of the premium costs (tables 59-61). In addition, the continuation period stipulated by the law is limited.¹⁸ The survey focused on coverage for retired and laid-off employees that was financed wholly or partly by the employer.

Forty-five percent of the health care participants in the survey worked for employers who financed all or part of health care protection after retirement. Among old scope participants, 55 percent had such coverage. Of those employees in plans with employer-financed retiree coverage, slightly more than half were eligible for retiree coverage fully paid by the employer. Coverage continued for life in nearly all cases.

The level of health care coverage for retirees under age 65 was generally the same as for active workers. Although benefit provisions were reduced for some retirees upon reaching age 65, more commonly there was no change in benefit levels apart from coordination with Medicare.

Employer-financed health care coverage for laid-off employees was less common. Only 25 percent of the participants had such protection; among old scope participants, coverage was 28 percent, down from 34 percent in 1986. This decline may be due to changes in the law. The maximum period of employer-financed protection was often 3 months or less, after which laid-off employees were required to pay the entire cost of continued coverage.

Life insurance

Life insurance plans covered 92 percent of full-time

¹⁸ The Consolidated Omnibus Budget Reconciliation Act of 1985 requires employers who maintain health insurance plans to continue insurance to terminated workers for up to 18 months. Workers may be charged up to 102 percent of the premium cost.

employees within the full scope of the 1988 survey; nearly all participants had the cost of a basic plan paid entirely by the employer (tables 62-68). Where an employee contribution was required, it was most commonly stated as a flat amount per \$1,000 of coverage, such as 25 cents per \$1,000 of coverage per month. Amounts of life insurance coverage have grown steadily since this survey series began in 1979, either through an increase in specified dollar amounts of insurance or through increased maximums in formulas linked to earnings.

Basic coverage for two-thirds of all life insurance participants was linked to their earnings, enabling the level of protection to increase automatically with a rise in pay. Earnings-based formulas were much more prevalent among white-collar workers (79 percent) than among blue-collar workers (50 percent). The most common method of tying life insurance protection to earnings was to multiply the employee's annual earnings by a factor of 1 or 2 and round the product to the next \$1,000. For example, an employee earning \$22,700 a year would receive \$46,000 of coverage under a plan providing 2 times earnings (\$22,700 times 2 equals \$45,400, which is rounded up to \$46,000).

The average multiple-of-earnings benefit formula was 1.5 times earnings. Half of all participants in these plans had insurance equal to their annual earnings. Two in five had coverage equal to twice annual earnings or more. Multiple-of-earnings formulas tended to be higher when employee contributions were required.

Sixty percent of all participants in multiple-of-earnings plans were subject to a limit on the amount of life insurance coverage in 1988, up from 52 percent in 1986. In plans where limits applied, almost 50 percent of the employees had maximum benefits ranging from \$100,000 to \$249,999. The percent of participants with maximums under \$100,000 has decreased from 21 to 13 percent since 1979.

A flat dollar amount of insurance applied to 31 percent of life insurance plan participants, regardless of earnings. Almost 50 percent of all blue-collar participants were covered by a uniform amount, compared with 18 percent of white-collar workers. Uniform amounts for professional and administrative participants averaged about \$14,000 compared to the \$10,500 average for the other two groups. While usually providing much smaller amounts of insurance than earnings-based formulas, flat amount coverage has improved over the years. Participants in plans providing less than \$5,000 coverage decreased sharply, from 29 percent in 1981 to 19 percent in 1986 and to 11 percent in 1988. In contrast, life insurance of \$10,000 or more is becoming increasingly prevalent.

Life insurance coverage may be reduced to account for the increased cost of insuring older active workers.¹⁹ In 1988,

56 percent of life insurance participants faced reduced coverage as older workers. Of the participants whose plans reduced coverage, nearly 60 percent would have their first reduction at age 65. Most of the remaining workers would experience this at age 70. It was uncommon for reductions to occur before age 65.

Many plans reduced coverage for older workers only once, typically to 50 percent of the original life insurance amount. Other plans had multistage reductions. One common provision was to reduce coverage to 65 percent at age 65, then to 50 percent at age 70.

Over three-fourths of the life insurance participants received accidental death and dismemberment (AD&D) insurance, which provides additional benefits if a worker dies or loses an eye or a limb in an accident. Typically, workers received an AD&D benefit equal to their basic life insurance benefit for accidental death, and a portion of that benefit for dismemberment.

More than half of life insurance participants were required to work a minimum period to qualify for the plan. Two-fifths of them had a 3-month requirement, but 1 month was also common.

Life insurance coverage for dependents was available to 18 percent of participants. Spouses were typically covered for \$1000, \$2000, or \$5000. Children were typically covered for \$1000 or \$2000, or for benefits that varied by the age of the child.

Plans that provided a monthly income to surviving members of an employee's family covered 8 percent of participants. These survivor income benefits were provided in addition to other available benefits, such as basic life insurance and survivor pension benefits. Survivor income payments were generally a percentage of the employee's earnings or a flat dollar amount. Benefits usually continued for 24 months, although some continued until a specific event occurred, such as the surviving spouse remarrying or reaching age 65, or surviving children reaching a given age.

Basic life insurance coverage continued after retirement for 49 percent of the participants. This coverage almost always continued for the remainder of the retiree's life, but for 90 percent of these employees, the amount of the benefit would be reduced at least once after retirement.

The drop in retiree life insurance coverage from 59 percent in 1986 to 49 percent in 1988 was largely the result of the expanded survey coverage. Retiree coverage was available to 58 percent of old scope life insurance participants in 1988.

¹⁹ The Age Discrimination in Employment Act (P.L. 99-592, 29 U.S.C. 621-634) permits employers to reduce employee benefits because of age when these reductions are justified by cost. The act, however, prohibits employers from discontinuing benefits for older employees. For additional details on life insurance benefits for older workers, see Michael A. Miller, "Age-related Reductions in Workers' Life Insurance," *Monthly Labor Review*, September 1985, pp 29-34.

Table 35. Health care benefits: Percent of full-time participants by coverage for selected categories of care, medium and large firms, 1988

Category of medical care	Total	Care provided					Care not provided ¹
		All	Covered in full	Subject to internal limits only ²	Subject to overall limits only ³	Subject to internal and overall limits	
All participants							
Hospital room and board	100	98	23	2	37	36	2
Hospitalization—miscellaneous services ⁴	100	98	22	3	37	36	2
Extended care facility ⁵	100	79	9	16	13	41	21
Home health care ⁶	100	76	23	10	14	29	24
Inpatient surgery	100	98	35	1	51	11	2
Outpatient surgery ⁸	100	98	39	1	49	10	2
Physician visits—in hospital	100	98	22	1	54	22	2
Physician visits—office	100	98	10	11	69	7	2
Diagnostic X-ray and laboratory	100	98	32	(⁹)	51	15	2
Prescription drugs—nonhospital	100	94	3	28	60	3	6
Private duty nursing	100	96	19	(⁹)	71	6	4
Mental health care	100	98	(⁹)	21	(⁹)	77	2
In hospital	100	96	(⁹)	24	10	63	4
Outpatient	100	96	(⁹)	21	2	72	4
Dental	100	66	1	62	-	3	34
Vision	100	35	5	26	1	3	65
Alcohol abuse treatment	100	80	4	21	3	51	20
Drug abuse treatment	100	74	4	19	3	48	26
Professional and administrative							
Hospital room and board	100	98	26	2	38	33	2
Hospitalization—miscellaneous services ⁴	100	98	26	2	38	33	2
Extended care facility ⁵	100	82	10	18	13	42	18
Home health care ⁶	100	80	25	10	15	30	20
Inpatient surgery	100	98	36	1	53	9	2
Outpatient surgery ⁸	100	98	41	(⁹)	49	7	2
Physician visits—in hospital	100	98	25	1	57	16	2
Physician visits—office	100	98	11	13	69	6	2
Diagnostic X-ray and laboratory	100	98	33	1	52	12	2
Prescription drugs—nonhospital	100	95	3	30	59	3	5
Private duty nursing	100	97	22	1	68	6	3
Mental health care	100	98	(⁹)	24	(⁹)	74	2
In hospital	100	96	(⁹)	25	11	59	4
Outpatient	100	97	(⁹)	24	2	71	3
Dental	100	72	1	67	-	4	28
Vision	100	36	6	26	1	3	64
Alcohol abuse treatment	100	82	5	23	3	50	18
Drug abuse treatment	100	76	5	21	3	47	24
Technical and clerical							
Hospital room and board	100	99	25	1	39	34	1
Hospitalization—miscellaneous services ⁴	100	99	25	1	39	34	1
Extended care facility ⁵	100	81	9	17	12	43	19
Home health care ⁶	100	80	24	10	15	31	20
Inpatient surgery	100	99	35	1	53	10	1
Outpatient surgery ⁸	100	99	40	(⁹)	50	8	1
Physician visits—in hospital	100	99	24	1	55	19	1
Physician visits—office	100	99	11	12	68	7	1
Diagnostic X-ray and laboratory	100	99	34	1	50	14	1
Prescription drugs—nonhospital	100	95	2	29	61	3	5
Private duty nursing	100	97	21	(⁹)	69	7	3
Mental health care	100	99	(⁹)	23	1	75	1
In hospital	100	96	(⁹)	25	11	60	4
Outpatient	100	98	(⁹)	23	2	72	2
Dental	100	68	1	65	-	3	32
Vision	100	36	6	26	1	3	64
Alcohol abuse treatment	100	82	5	22	3	52	18
Drug abuse treatment	100	76	5	20	2	49	24

See footnotes at end of table.

Table 35. Health care benefits: Percent of full-time participants by coverage for selected categories of care, medium and large firms, 1988—Continued

Large firms, 1988—Continued							
Category of medical care	Total	Care provided					Care not provided ¹
		All	Covered in full	Subject to internal limits only ²	Subject to overall limits only ²	Subject to internal and overall limits	
Production and service							
Hospital room and board	100	98	19	4	36	40	2
Hospitalization—miscellaneous services ³	100	98	19	4	36	40	2
Extended care facility ⁴	100	75	8	16	12	40	25
Home health care ⁵	100	72	22	10	13	27	28
Inpatient surgery	100	98	33	2	49	13	2
Outpatient surgery ⁶	100	98	37	2	47	13	2
Physician visits—in hospital	100	98	18	1	53	26	2
Physician visits—office	100	97	8	10	71	9	3
Diagnostic X-ray and laboratory	100	98	30	(⁷)	51	16	2
Prescription drugs—nonhospital	100	93	3	27	60	3	7
Private duty nursing	100	95	15	(⁷)	73	6	5
Mental health care	100	98	(⁷)	18	(⁷)	79	2
In hospital	100	97	(⁷)	22	9	66	3
Outpatient	100	95	1	18	3	74	5
Dental	100	62	1	58	-	3	38
Vision	100	34	4	26	1	2	66
Alcohol abuse treatment	100	77	4	20	4	50	23
Drug abuse treatment	100	72	4	17	3	48	28

¹ For all but dental and/or vision care, percents include employees who elected to waive participation in their employer's medical program but who enrolled in dental and/or vision plans.

² Internal limits apply to individual categories of care, e.g., separate limits or benefits for hospitalization. Limits may be set in terms of dollar ceilings on benefits, a requirement that the participant pay a percentage of costs (coinsurance), or a requirement that the participant pay a specific amount (deductible or copayment) before reimbursement begins or services are rendered.

³ Overall limits are expressed only in terms of total benefits payable under the plan, rather than for individual categories of care. Limits are set as deductibles, coinsurance percentages, and overall dollar limits on plan

benefits.

⁴ Services provided during a hospital confinement.

⁵ Some plans provide this care only to a patient who was previously hospitalized and is recovering without need of the extensive care provided by a general hospital. Excludes provisions for hospice care, which are shown in table 53.

⁶ Charges incurred in the outpatient department of a hospital and outside of the hospital.

⁷ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 36. Health care benefits: Percent of full-time participants by arrangement for payment to providers and type of financial intermediary, medium and large firms, 1988

Fee arrangement and financial intermediary	All participants			Professional and administrative participants			Technical and clerical participants			Production and service participants		
	Medical care ¹	Dental care	Vision care	Medical care ¹	Dental care	Vision care	Medical care ¹	Dental care	Vision care	Medical care ¹	Dental care	Vision care
Total	100	100	100	100	100	100	100	100	100	100	100	100
Traditional fee for service	74	93	58	70	93	52	70	91	52	78	95	64
No intermediary--self insured ²	31	40	26	30	41	23	27	38	26	33	42	29
Commercial insurance company	25	40	17	25	41	15	24	42	14	26	39	20
Blue Cross-Blue Shield	13	6	4	12	6	5	14	6	5	13	7	4
Independent organization	(³)	(³)	-	(³)	(³)	-	(³)	(³)	-	(³)	(³)	-
Other	(³)	5	9	(³)	4	9	(³)	4	7	(³)	7	11
Combined	5	1	1	4	(³)	(³)	5	1	1	7	1	1
Preferred provider organization ⁴	7	2	4	7	2	4	8	3	4	7	1	4
No intermediary--self insured ²	3	(³)	(³)	3	(³)	1	3	(³)	1	2	(³)	(³)
Commercial insurance company	3	1	2	3	2	2	3	3	1	2	(³)	(³)
Blue Cross-Blue Shield	1	(³)	2	1	(³)	1	1	(³)	2	2	(³)	2
Independent organization	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Other	-	(³)	-	-	-	-	-	(³)	(³)	(³)	(³)	(³)
Combined	(³)	-	-	(³)	-	-	(³)	-	-	(³)	-	-
Prepaid health maintenance organization ⁵	19	5	38	22	5	44	22	6	44	16	5	31
No intermediary--self insured ²	-	(³)	-	-	(³)	-	-	(³)	-	-	(³)	-
Commercial insurance company	2	(³)	3	2	1	4	3	1	5	2	(³)	2
Blue Cross-Blue Shield	2	(³)	3	2	(³)	4	2	(³)	4	1	(³)	2
Independent organization	15	4	32	18	4	36	16	5	35	13	4	28
Other	-	-	(³)	-	-	(³)	-	-	(³)	-	-	(³)
Other ⁶	(³)	-	(³)	(³)	-	(³)	(³)	-	(³)	(³)	-	(³)

¹ Plans providing services or payments for services rendered in the hospital or by a physician. Excludes plans that provided only dental, vision, or prescription drug coverage.

² Includes plans that are financed on a pay-as-you-go basis, plans financed through contributions to a trust fund established to pay benefits, and plans operating their own facilities if at least partially financed by employer contributions. Includes plans that are administered by a commercial carrier through Administrative Services Only-Minimum Premium Plan (ASO-MPP) contracts and plans in which a commercial carrier provides protection only against extraordinary claims.

³ Less than 0.5 percent.

⁴ A preferred provider organization (PPO) is a group of hospitals and physicians that contracts to provide comprehensive medical services. To

encourage use of organization members, the health care plans limits reimbursement rates when participants use nonmember services.

⁵ Includes federally qualified (those meeting standards of the Health Maintenance Organization Act of 1973, as amended) and other HMO's delivering comprehensive health care on a prepayment rather than fee-for-service basis.

⁶ Includes exclusive provider organizations, which are groups of hospitals and physicians that contract to provide comprehensive medical services. Participants are required to obtain services from members of the organization in order to receive plan benefits.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 37. Health care benefits: Percent of full-time participants in plans with overall limitations on benefits by amount of deductible,¹ medium and large firms, 1988

Type and amount of deductible ²	All participants			Professional and administrative participants			Technical and clerical participants			Production and service participants		
	Total	Deductible		Total	Deductible		Total	Deductible		Total	Deductible	
		Includes hospital expense	Excludes hospital expense		Includes hospital expense	Excludes hospital expense		Includes hospital expense	Excludes hospital expense		Includes hospital expense	Excludes hospital expense
Total	100	79	21	100	79	21	100	82	18	100	78	22
Deductible specified	95	79	16	96	79	17	96	81	15	94	78	17
Deductible on an annual basis ³	94	78	16	95	79	17	95	81	15	93	76	16
Based on earnings ⁴	3	3	(⁵)	4	4	(⁵)	4	4	(⁵)	3	2	(⁵)
Fiat dollar amount	91	75	16	91	75	17	91	77	14	90	74	16
Less than \$50	1	1	-	(⁵)	(⁵)	-	(⁵)	(⁵)	-	1	1	-
\$50	9	7	2	6	5	2	6	4	1	12	10	2
\$51-\$99	1	1	(⁵)	2	1	1	2	1	1	1	1	(⁵)
\$100	40	32	8	40	33	7	40	33	7	40	32	8
\$101-\$149	2	1	(⁵)	2	1	(⁵)	1	1	(⁵)	2	2	(⁵)
\$150	11	10	1	11	10	2	12	11	1	10	9	1
\$151-\$199	(⁵)	(⁵)	(⁵)	1	1	(⁵)	(⁵)	(⁵)	(⁵)	1	(⁵)	(⁵)
\$200	18	15	3	18	15	3	19	16	3	17	14	3
\$201-\$249	1	1	(⁵)	1	1	1	1	(⁵)	(⁵)	1	1	(⁵)
\$250	3	2	(⁵)	3	3	(⁵)	3	3	(⁵)	2	2	(⁵)
\$251-\$299	(⁵)	(⁵)	-	(⁵)	(⁵)	-	(⁵)	(⁵)	-	(⁵)	(⁵)	-
\$300	2	2	1	3	2	1	3	2	(⁵)	2	1	1
Over \$300	3	3	(⁵)	4	4	(⁵)	4	4	(⁵)	2	2	(⁵)
Deductible not on an annual basis	1	1	(⁵)	1	1	(⁵)	1	1	(⁵)	1	1	(⁵)
No deductible	5	(⁵)	5	4	(⁵)	4	4	(⁵)	4	6	(⁵)	6

¹ The deductible is the amount of covered expenses that an individual must pay before any charges are paid by the insurance plan. Deductibles that apply separately to a specific category of expense, such as a deductible for each hospital admission, were excluded from this tabulation.

² Amount of deductible described is for each insured person. However, many plans contain a maximum family deductible. In some plans, the individual and family deductibles are identical. If the deductible applied only to dependents' coverage, it was not tabulated.

³ The basis of the deductible is the length of time within which a single

deductible requirement applies. Some plans require that expenses equal to the deductible be incurred within a shorter period, such as 90 days.

⁴ These plans have deductibles that vary by the amount of the participant's earnings. A typical provision is 1 percent of annual earnings with a maximum deductible of \$150.

⁵ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 38. Health care benefits: Percent of full-time participants in plans with overall limitations on benefits by maximum out-of-pocket expense provisions, medium and large firms, 1988

Provision	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Maximum on annual out-of-pocket expense	82	84	84	80
Per individual:				
\$1-\$249	1	1	1	1
\$250-\$499	15	15	15	14
\$500-\$749	17	16	15	18
\$750-\$999	14	17	18	11
\$1,000-\$1,249	21	22	22	21
\$1,250-\$1,499	4	3	3	5
\$1,500-\$1,999	5	5	7	5
\$2,000-\$2,499	3	3	2	3
\$2,500 and greater	2	2	1	1
Per family:				
\$1-\$499	2	2	2	1
\$500-\$749	1	1	1	2
\$750-\$999	5	6	5	5
\$1,000-\$1,249	7	7	7	7
\$1,250-\$1,499	2	1	1	2
\$1,500-\$1,999	8	9	8	7
\$2,000-\$2,999	8	8	8	8
\$3,000-\$3,999	3	4	4	3
\$4,000 and greater	2	2	2	1
No family maximum	44	43	46	43
Coinsurance varies by procedure ¹	2	2	3	2
No maximum on out-of-pocket expenses	16	14	13	19
Coinsurance unchanged	16	14	13	18
Final coinsurance changes to other than 100 percent	(²)	1	(²)	(²)

¹ Deductible amounts were excluded from computation of the out-of-pocket dollar limits. With rare exceptions, an annual out-of-pocket limit was specified. Few workers were in plans where the expense limit applied to a disability or a period other than a year. Charges for certain services, such as mental health care, may not be counted toward the out-of-pocket maximum.

² Plan pays 100 percent of expenses after specific dollar amount of expenses is incurred. Different coinsurance rates, however, apply to different procedures and, therefore, actual out-of-pocket expenses vary depending upon the specific procedures for which the expenses were incurred.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 39. Health care benefits: Percent of full-time participants in plans with overall limitations on benefits by total annual deductible and maximum out-of-pocket expense, medium and large firms, 1988

Dollar amount ¹	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Plan specifies annual deductible and out-of-pocket maximum	78	81	81	76
\$100-\$299	1	1	1	1
\$300-\$499	3	2	2	3
\$500-\$699	21	20	20	22
\$700-\$899	7	7	7	6
\$900-\$1,099	13	16	15	11
\$1,100-\$1,299	17	18	17	16
\$1,300-\$1,499	3	2	3	4
\$1,500-\$1,699	3	3	3	3
\$1,700-\$1,899	2	2	3	1
\$1,900-\$2,099	3	2	3	3
\$2,100 and greater	4	5	3	4
Based on earnings	2	2	3	2
Deductible not on an annual basis ..	3	3	3	4
Plan does not specify maximum annual out-of-pocket expense	18	16	16	20

¹ Total amount of deductible and out-of-pocket maximum is for each insured person. In some plans, the individual and family deductibles are identical.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 40. Health care benefits: Percent of full-time participants in plans with overall limitations on benefits by maximum benefit provisions, medium and large firms, 1988

Type and dollar amount of maximum ¹	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
With maximum limits	77	75	76	79
Lifetime maximum only	71	72	72	70
Less than \$100,000	2	1	1	2
\$100,000	2	1	1	2
\$100,001-\$249,999	1	(²)	(²)	1
\$250,000	10	10	10	10
\$250,001-\$499,999	2	1	1	2
\$500,000	15	13	15	15
\$500,001-\$999,999	2	3	2	2
\$1,000,000	38	41	41	34
More than \$1,000,000	1	1	1	1
Annual or disability maximum only	4	2	2	6
Both lifetime and annual or disability maximums	2	2	1	3
Without maximum limits	23	25	24	21

¹ Maximum described is for each insured person. Where maximum differed for employees and dependents, the employee maximum was tabulated.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 41. Health care benefits: Percent of full-time participants in plans with hospital room and board coverage by type of benefit payments and limits to coverage, medium and large firms, 1988

Type of payment	All	Not subject to limits on days or dollars	Subject to limits on days or dollars		
			Subject only to overall dollar limitations	Subject only to limit on days of coverage	Subject to limitations on both dollars and days of coverage ¹
All participants					
Total	100	34	39	6	21
Full semiprivate rate ²	31	25	3	1	1
Full semiprivate rate for limited period, then percent of semiprivate rate	24	-	3	4	17
80 percent	22	-	3	3	16
85 percent	1	-	(³)	(³)	(³)
90 percent	1	-	(³)	(³)	(³)
Other	(³)	-	(³)	(³)	1
Varies ⁴	(³)	-	(³)	-	(³)
Percent of semiprivate rate	42	8	32	(³)	1
80 percent	32	7	25	(³)	1
85 percent	2	(³)	1	-	(³)
90 percent	5	1	4	(³)	(³)
Other	1	(³)	1	(³)	(³)
Varies ⁴	2	(³)	2	(³)	-
Percent of semiprivate rate for limited period, then overall coinsurance provisions	1	-	-	(³)	1
Daily dollar allowance	(³)	-	-	(³)	(³)
Daily dollar allowance, plus percent of additional charges	2	-	1	(³)	1
Professional and administrative					
Total	100	38	38	5	18
Full semiprivate rate ²	35	30	4	(³)	1
Full semiprivate rate for limited period, then percent of semiprivate rate	23	-	3	4	16
80 percent	21	-	2	4	14
85 percent	1	-	(³)	(³)	1
90 percent	1	-	-	(³)	(³)
Other	(³)	-	-	(³)	(³)
Varies ⁴	(³)	-	(³)	-	(³)
Percent of semiprivate rate	41	9	31	(³)	1
80 percent	31	7	23	(³)	1
85 percent	2	(³)	2	-	(³)
90 percent	5	1	4	(³)	(³)
Other	1	(³)	1	-	(³)
Varies ⁴	1	(³)	1	(³)	-
Percent of semiprivate rate for limited period, then overall coinsurance provisions	1	-	-	(³)	1
Daily dollar allowance, plus percent of additional charges	1	-	(³)	(³)	1

See footnotes at end of table.

Table 41. Health care benefits: Percent of full-time participants in plans with hospital room and board coverage by type of benefit payments and limits to coverage, medium and large firms, 1988—Continued

Type of payment	All	Not subject to limits on days or dollars	Subject to limits on days or dollars		
			Subject only to overall dollar limitations	Subject only to limit on days of coverage	Subject to limitations on both dollars and days of coverage ¹
Technical and clerical					
Total	100	36	39	6	19
Full semiprivate rate ²	33	28	4	(³)	1
Full semiprivate rate for limited period, then percent of semiprivate rate	24	-	3	5	16
80 percent	22	-	3	4	15
85 percent	1	-	(³)	(³)	1
90 percent	1	-	-	(³)	(³)
Other	(³)	-	-	(³)	(³)
Varies ⁴	(³)	-	(³)	-	(³)
Percent of semiprivate rate	41	8	31	(³)	1
80 percent	30	7	23	-	1
85 percent	2	(³)	1	-	(³)
90 percent	6	2	4	(³)	(³)
Other	1	(³)	1	-	(³)
Varies ⁴	1	(³)	1	(³)	-
Percent of semiprivate rate for limited period, then overall coinsurance provisions	2	-	-	(³)	2
Daily dollar allowance, plus percent of additional charges	1	-	1	(³)	(³)
Production and service					
Total	100	29	41	6	24
Full semiprivate rate ²	27	21	3	2	1
Full semiprivate rate for limited period, then percent of semiprivate rate	25	-	3	3	18
80 percent	23	-	2	3	18
85 percent	(³)	-	(³)	(³)	(³)
90 percent	1	-	(³)	(³)	1
Other	(³)	-	-	-	(³)
Varies ⁴	(³)	-	(³)	-	-
Percent of semiprivate rate	44	8	34	1	1
80 percent	34	6	27	-	1
85 percent	1	(³)	1	-	(³)
90 percent	4	1	3	(³)	(³)
Other	2	1	1	(³)	(³)
Varies ⁴	2	(³)	2	(³)	-
Percent of semiprivate rate for limited period, then overall coinsurance provisions	1	-	-	(³)	1
Daily dollar allowance	(³)	-	-	(³)	(³)
Daily dollar allowance, plus percent of additional charges	3	-	1	(³)	2

¹ Includes plans that limited benefits to either a limit on days of coverage or an overall dollar limitation, whichever was reached first.

² Includes full service benefits provided by health maintenance organizations or preferred providers.

³ Less than 0.5 percent.

⁴ Coinsurance rate varies depending on length of hospital stay.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 42. Health care benefits: Percent of full-time participants in plans with inhospital surgical benefits by type of payment and comparison with outpatient surgical coverage, medium and large firms, 1988

Type of payment for in-hospital surgery	Total	Covered the same as in-hospital surgery	Outpatient surgery ¹				
			Total ²	Coverage differs from in-hospital surgery coverage			Other differences ³
				90 percent or 95 percent	100 percent	Different coinsurance	
All participants							
Total	100	70	30	2	24	1	4
Full usual, customary, and reasonable charge ⁴	35	34	1	-	-	1	1
Full usual, customary, and reasonable charge up to a specified amount, plus percent of additional charges	2	1	(¹)	-	(¹)	-	(¹)
Percent of usual, customary, and reasonable charge:							
80 percent	39	18	20	2	17	-	2
85 percent	2	1	1	(¹)	1	-	(¹)
90 percent	5	3	2	(¹)	2	(¹)	(¹)
95 percent	(¹)	-	(¹)	-	(¹)	-	-
Other percent	7	5	2	(¹)	2	-	(¹)
Percent of usual, customary, and reasonable charge plus percent of additional charges based on plan's coinsurance rate	2	(¹)	1	(¹)	1	-	(¹)
Dollar allowance per procedure, plus percent of additional charges:							
80 percent	6	5	1	-	1	-	1
Other percent	1	(¹)	(¹)	-	(¹)	-	-
Dollar allowance per procedure	1	(¹)	(¹)	-	-	(¹)	(¹)
Professional and administrative							
Total	100	70	30	2	25	(¹)	3
Full usual, customary, and reasonable charge ⁴	37	36	(¹)	-	-	(¹)	(¹)
Full usual, customary, and reasonable charge up to a specified amount, plus percent of additional charges	2	1	(¹)	-	(¹)	-	(¹)
Percent of usual, customary, and reasonable charge:							
80 percent	39	18	20	2	17	-	2
85 percent	3	1	2	-	1	-	(¹)
90 percent	5	3	2	(¹)	2	(¹)	(¹)
95 percent	(¹)	-	(¹)	-	(¹)	-	-
Other percent	8	5	2	(¹)	2	-	(¹)
Percent of usual, customary, and reasonable charge plus percent of additional charges based on plan's coinsurance rate	2	1	2	(¹)	2	-	(¹)
Dollar allowance per procedure, plus percent of additional charges:							
80 percent	4	3	1	-	1	-	(¹)
Other percent	1	(¹)	(¹)	-	(¹)	-	-
Dollar allowance per procedure	(¹)	(¹)	(¹)	-	-	(¹)	-

See footnotes at end of table.

Table 42. Health care benefits: Percent of full-time participants in plans with inpatient surgical benefits by type of payment and comparison with outpatient surgical coverage, medium and large firms, 1988—Continued

Type of payment for inpatient surgery	Total	Outpatient surgery ¹					
		Covered the same as inpatient surgery	Coverage differs from inpatient surgery coverage				Other differences ²
			Total ³	Different coinsurance			
				90 percent or 95 percent	100 percent	Other percent	
Technical and clerical							
Total	100	69	31	2	26	1	2
Full usual, customary, and reasonable charge ⁴	36	35	(⁵)	-	-	(⁵)	(⁵)
Full usual, customary, and reasonable charge up to a specified amount, plus percent of additional charges	1	1	(⁵)	-	(⁵)	-	(⁵)
Percent of usual, customary, and reasonable charge:							
80 percent	38	18	20	2	17	-	1
85 percent	2	1	1	-	1	-	(⁵)
90 percent	7	4	3	(⁵)	3	(⁵)	(⁵)
95 percent	(⁵)	-	(⁵)	-	(⁵)	-	-
Other percent	8	5	3	-	3	-	(⁵)
Percent of usual, customary, and reasonable charge plus percent of additional charges based on plan's coinsurance rate	2	1	2	(⁵)	2	-	(⁵)
Dollar allowance per procedure, plus percent of additional charges:							
80 percent	5	4	1	-	1	-	(⁵)
Other percent	1	(⁵)	(⁵)	-	(⁵)	-	-
Dollar allowance per procedure	(⁵)	(⁵)	(⁵)	-	-	(⁵)	-
Production and service							
Total	100	70	30	1	23	1	6
Full usual, customary, and reasonable charge ⁴	34	33	1	-	-	1	1
Full usual, customary, and reasonable charge up to a specified amount, plus percent of additional charges	2	1	(⁵)	-	(⁵)	-	(⁵)
Percent of usual, customary, and reasonable charge:							
80 percent	39	18	21	1	17	-	3
85 percent	2	1	1	(⁵)	1	-	-
90 percent	5	3	2	-	1	(⁵)	(⁵)
95 percent	(⁵)	-	(⁵)	-	(⁵)	-	-
Other percent	7	5	1	-	1	-	(⁵)
Percent of usual, customary, and reasonable charge plus percent of additional charges based on plan's coinsurance rate	1	(⁵)	1	(⁵)	1	-	(⁵)
Dollar allowance per procedure, plus percent of additional charges:							
80 percent	8	7	2	-	1	-	1
Other percent	1	1	(⁵)	-	(⁵)	-	-
Dollar allowance per procedure	2	1	1	-	-	(⁵)	1

¹ Outpatient surgery was covered in all plans with surgical benefits. If coverage for surgeon's fees differed by location where the procedure was performed, coverage at doctor's office was tabulated.

² Sums of individual items may exceed total because some plans have more than one difference between inpatient and outpatient surgery.

³ Includes plans with separate yearly or per illness maximums for

outpatient surgery. In other plans, deductible provisions varied.

⁴ Includes full service benefits provided by health maintenance organizations or preferred provider organizations.

⁵ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 43. Health care benefits: Percent of full-time participants in plans with in-hospital surgical benefits by second surgical opinion provisions, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
With second surgical opinion provision	59	59	59	59
Plan pays for, but does not provide incentives for, second opinions	24	24	24	24
Plan provides incentives for second opinions	35	35	36	34
For selected procedures ¹	30	31	31	30
No payment without second opinion	2	1	1	3
Reduced payment without second opinion	26	27	27	24
Increased payment with second opinion	3	3	3	2
For all procedures	4	3	3	4
Reduced payment without second opinion	1	(²)	(²)	1
Schedule of payments lower without second opinion	3	2	3	4
Details of incentive not available	1	1	1	(²)
Without second surgical opinion provision	41	41	41	41

¹ Procedures most commonly mentioned were tonsillectomy, adenoidectomy, hysterectomy, surgery of the nose or back, removal of the gall bladder, and coronary bypass surgery.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 44. Health care benefits: Percent of full-time participants in plans with mental health benefits by extent of benefits, medium and large firms, 1986

Coverage limitation	All participants		Professional and administrative participants		Technical and clerical participants		Production and service participants	
	Hospital care ¹	Outpatient care ²	Hospital care ¹	Outpatient care ²	Hospital care ¹	Outpatient care ²	Hospital care ¹	Outpatient care ²
Total	100	100	100	100	100	100	100	100
With coverage	98	98	97	99	97	99	99	97
Covered the same as other illnesses	27	3	27	3	25	3	28	3
Subject to separate limitations ³	71	95	70	96	72	96	70	94
Limit on days	45	36	45	38	46	38	45	34
Per year	36	35	37	37	37	37	36	32
Per confinement	7	-	6	-	8	-	/	-
Per lifetime	2	-	2	-	1	-	2	-
Per other period	-	1	-	1	-	1	-	1
Limit on dollars	31	65	30	62	32	64	31	68
Per day	(⁴)	7	(⁴)	6	(⁴)	5	(⁴)	8
Per year	3	31	4	29	4	31	3	32
Per confinement	(⁴)	-	(⁴)	-	(⁴)	-	(⁴)	-
Per lifetime	27	28	25	27	28	28	28	28
Per other period	-	(⁴)	-	(⁴)	-	(⁴)	-	(⁴)
Coinsurance limit	8	62	8	59	8	62	8	64
50 percent	4	49	3	46	4	50	4	50
Other ⁵	4	14	5	14	5	12	3	15
Ceiling on out-of-pocket expenses does not apply	13	43	12	42	14	47	13	42
Separate copayment or deductible	1	14	1	16	1	16	1	12
Other limitations ⁶	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Without coverage	2	2	3	1	3	1	1	3

¹ Excludes doctor's charges in the hospital.

² Includes treatment in one or more of the following: Outpatient department of a hospital, residential treatment center, organized outpatient clinic, day-night treatment center, or doctor's office. If benefits differed by location of treatment, doctor's office care was tabulated.

³ The total is less than the sum of the individual items because many plans had more than one type of limitation on mental health coverage.

⁴ Less than 0.5 percent.

⁵ Includes plans with reduced coinsurance other than 50 percent and plans where the rate of reimbursement varied during the treatment period.

⁶ Includes plans where coverage was subject to overall deductibles or maximum dollar amounts that differed from those for physical illnesses.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 45. Health care benefits: Percent of full-time participants in plans with alcohol abuse treatment benefits by extent of benefits, medium and large firms, 1988

Coverage limitation	All participants			Professional and administrative participants			Technical and clerical participants			Production and service participants		
	Inpatient detoxification ¹	Inpatient rehabilitation ²	Out-patient care ³	Inpatient detoxification ¹	Inpatient rehabilitation ²	Out-patient care ³	Inpatient detoxification ¹	Inpatient rehabilitation ²	Out-patient care ³	Inpatient detoxification ¹	Inpatient rehabilitation ²	Out-patient care ³
Total	100	100	100	100	100	100	100	100	100	100	100	100
With coverage	95	78	84	96	79	83	96	78	84	94	78	84
Covered the same as other illnesses	29	15	17	32	16	19	30	14	18	26	15	15
Covered the same as mental illness	7	6	18	7	6	17	7	6	19	7	6	18
Subject to separate limitations ⁴	59	57	49	57	57	47	58	58	46	61	57	51
Limit on days	46	46	24	45	45	23	46	46	24	47	45	26
Per year	26	27	24	26	28	22	26	27	23	27	27	25
Per confinement	18	16	-	18	15	-	20	16	-	18	16	-
Per lifetime	15	17	7	15	18	6	15	17	5	15	16	8
Per other period	-	-	(¹)	-	-	(¹)	-	-	(¹)	-	-	(¹)
Limit on dollars	21	19	28	19	18	26	19	19	26	23	20	30
Per day	1	1	6	1	(¹)	5	1	(¹)	6	1	1	7
Per year	9	8	19	9	8	19	8	8	18	9	8	21
Per confinement	(¹)	(¹)	-	(¹)	(¹)	-	(¹)	(¹)	-	(¹)	(¹)	-
Per lifetime	16	15	10	14	14	11	15	14	11	17	16	9
Per other period	-	-	(¹)	-	-	(¹)	-	-	(¹)	-	-	(¹)
Coinsurance limit ⁵	6	5	13	5	6	15	6	5	15	7	5	12
Ceiling on out-of-pocket expenses does not apply	4	5	10	4	5	10	5	5	12	4	4	9
Separate copayment or deductible	1	1	6	1	1	7	1	1	7	1	1	6
Other limitations ⁷	1	1	1	1	1	1	1	1	1	1	1	1
Without coverage	5	22	16	4	21	17	4	22	16	6	22	16

¹ Detoxification is the systematic use of medication and other methods under medical supervision to reduce or eliminate the effects of substance abuse.

² Rehabilitation is designed to alter abusive behavior in patients once they are free of acute physical and mental complications.

³ Includes treatment in one or more of the following: Outpatient department of a hospital, residential treatment center, organized outpatient clinic, day-night treatment center, or doctor's office. If benefits differed by location of treatment, doctor's office care was tabulated.

⁴ The total is less than the sum of the individual items because many

plans had more than one type of limitation.

⁵ Less than 0.5 percent.

⁶ Coinsurance rate is lower than that applying to other medical services.

⁷ Includes plans where coverage was subject to overall deductibles or maximum dollar amounts that differed from those for other medical services.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 46. Health care benefits: Percent of full-time participants in plans with drug abuse treatment benefits by extent of benefits, medium and large firms, 1988

Coverage limitation	All participants			Professional and administrative participants			Technical and clerical participants			Production and service participants		
	Inpatient detoxification ¹	Inpatient rehabilitation ²	Out-patient care ³	Inpatient detoxification ¹	Inpatient rehabilitation ²	Out-patient care ³	Inpatient detoxification ¹	Inpatient rehabilitation ²	Out-patient care ³	Inpatient detoxification ¹	Inpatient rehabilitation ²	Out-patient care ³
Total	100	100	100	100	100	100	100	100	100	100	100	100
With coverage	96	77	81	97	78	81	97	77	81	94	76	82
Covered the same as other illnesses	28	13	17	32	15	19	30	13	19	24	11	15
Covered the same as mental illness	7	6	18	7	6	17	8	7	20	7	6	18
Subject to separate limitations ⁴	61	58	46	57	56	44	59	57	42	64	59	48
Limit on days	47	46	21	45	45	19	46	46	19	48	46	23
Per year	26	27	20	26	27	18	25	25	18	27	27	22
Per confinement	18	17	-	17	15	-	20	18	-	18	17	-
Per lifetime	15	16	6	15	18	5	14	16	4	15	15	8
Per other period	-	-	(⁵)	-	-	(⁵)	-	-	(⁵)	-	-	(⁵)
Limit on dollars	21	19	27	19	18	26	19	19	26	23	20	29
Per day	(⁵)	(⁵)	6	1	(⁵)	5	1	(⁵)	6	(⁵)	(⁵)	6
Per year	9	7	19	8	8	18	8	7	17	9	7	21
Per confinement	(⁵)	(⁵)	-	(⁵)	(⁵)	-	(⁵)	(⁵)	-	(⁵)	(⁵)	-
Per lifetime	16	16	11	15	15	12	15	15	12	18	17	9
Per other period	-	-	(⁵)	-	-	(⁵)	-	-	(⁵)	-	-	-
Coinurance limit ⁶	7	6	13	5	6	14	7	6	14	8	6	12
Ceiling on out-of-pocket expenses does not apply	5	5	10	5	5	10	5	6	12	4	4	9
Separate copayment or deductible	1	1	6	1	1	7	1	1	7	1	1	5
Other limitations ⁷	1	1	2	1	1	2	1	1	2	2	2	2
Without coverage	4	23	19	3	22	19	3	23	19	6	24	18

¹ Detoxification is the systematic use of medication and other methods under medical supervision to reduce or eliminate the effects of substance abuse.

² Rehabilitation is designed to alter abusive behavior in patients once they are free of acute physical and mental complications.

³ Includes treatment in one or more of the following: Outpatient department of a hospital, residential treatment center, organized outpatient clinic, day-night treatment center, or doctor's office. If benefits differed by location of treatment, doctor's office care was tabulated.

⁴ The total is less than the sum of the individual items because many

plans had more than one type of limitation.

⁵ Less than 0.5 percent.

⁶ Coinsurance rate is lower than that applying to other medical services.

⁷ Includes plans where coverage was subject to overall deductibles or maximum dollar amounts that differed from those for other medical services.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 47. Health care benefits: Percent of full-time participants in plans with dental benefits by extent of coverage for selected procedures, medium and large firms, 1988

Type of dental procedure	Total ¹	Scheduled cash allowance	Incentive schedule ²	Subject to co-payment ³	Percent of usual, customary, and reasonable charge											Subject to over-all plan provisions only ⁴	Not covered	Not determinable
					Total	Less than 50	50	51-59	60	61-75	80	85	90	91-99	100 ⁵			
All participants																		
Examinations	100	12	2	1	84	()	1	-	()	3	16	()	2	-	61	1	()	-
Dental X-rays	100	12	2	1	84	()	1	-	()	4	19	2	5	-	53	1	()	-
Fillings	100	17	2	1	78	()	5	-	1	8	43	5	5	()	11	2	()	-
Dental surgery ⁷	100	16	2	3	76	()	5	-	1	7	43	5	5	()	10	2	1	1
Inlays	100	17	1	2	72	()	45	-	5	4	8	2	3	-	4	2	7	-
Crowns	100	17	1	4	74	()	45	-	5	4	9	2	3	-	4	2	7	-
Periodontal care	100	16	2	3	74	()	8	-	1	7	42	5	5	()	4	2	3	-
Endodontics	100	16	2	3	76	()	6	-	1	7	43	5	5	()	7	2	2	1
Prosthetics	100	18	()	4	73	()	53	()	5	2	8	5	5	()	9	2	1	1
Orthodontia ⁸	100	()	-	3	66	()	47	()	4	()	2	-	1	()	3	2	4	-
Professional and administrative																		
Examinations	100	13	2	2	83	()	1	-	()	3	17	()	1	-	62	1	()	-
Dental X-rays	100	12	2	1	84	()	1	-	()	4	20	1	3	-	55	1	()	-
Fillings	100	17	2	1	78	()	5	-	1	8	48	4	2	()	10	1	()	-
Dental surgery ⁷	100	16	2	2	77	()	5	-	()	7	47	4	2	()	10	1	1	1
Inlays	100	16	()	2	72	()	49	-	6	4	8	1	1	-	3	1	7	-
Crowns	100	17	()	4	75	()	50	-	6	4	9	1	1	-	3	1	3	-
Periodontal care	100	16	1	3	75	()	8	-	1	6	46	5	2	()	6	1	2	1
Endodontics	100	16	1	2	77	()	6	-	1	6	48	5	2	()	8	1	1	1
Prosthetics	100	17	()	4	74	()	55	()	6	2	8	()	-	-	2	1	4	-
Orthodontia ⁸	100	()	-	4	68	()	48	()	5	()	2	()	()	()	13	-	28	-
Technical and clerical																		
Examinations	100	9	2	1	87	()	1	-	()	4	15	()	2	-	65	1	()	-
Dental X-rays	100	9	2	1	87	()	1	-	()	4	18	1	3	-	59	1	()	-
Fillings	100	15	2	1	80	()	5	-	1	8	47	4	3	-	12	1	()	-
Dental surgery ⁷	100	15	2	3	78	()	5	-	1	8	46	4	4	()	10	1	()	-
Inlays	100	14	1	2	72	()	49	-	7	5	7	1	1	-	2	1	9	-
Crowns	100	15	1	5	75	()	50	-	7	5	8	1	1	-	3	1	3	-
Periodontal care	100	15	2	4	76	()	8	-	1	7	45	4	3	()	6	1	2	-
Endodontics	100	15	2	3	77	()	6	-	1	7	47	4	3	()	8	1	1	1
Prosthetics	100	16	()	5	73	()	54	()	7	3	7	()	3	()	1	1	5	-
Orthodontia ⁸	100	()	-	4	64	()	47	()	5	()	1	()	()	()	11	-	32	-
Production and service																		
Examinations	100	13	2	1	83	()	2	-	()	3	17	()	3	-	57	1	()	-
Dental X-rays	100	13	2	()	83	()	2	-	()	3	19	3	3	-	47	1	()	-
Fillings	100	19	2	()	76	()	5	-	1	7	38	5	7	()	12	2	1	-
Dental surgery ⁷	100	16	2	2	74	()	5	-	1	7	38	6	8	()	10	2	1	2
Inlays	100	18	1	2	71	()	39	-	4	3	9	3	6	-	5	2	6	-
Crowns	100	19	1	3	72	()	40	-	4	4	10	3	6	-	6	2	3	-
Periodontal care	100	17	2	3	72	()	7	-	1	7	37	6	7	()	7	2	2	2
Endodontics	100	17	2	2	74	()	6	-	1	7	38	6	7	()	9	2	1	2
Prosthetics	100	19	()	3	73	()	52	()	4	2	9	()	1	-	4	2	3	-
Orthodontia ⁸	100	()	-	2	66	()	47	()	3	()	3	()	()	()	13	-	32	-

¹ Coverage may be also subject to maximum and deductible provisions.

² Reimbursement arrangement in which the percentage of dental expenses paid by the plan increases if regular dental appointments are scheduled.

³ Participant pays a specific amount per procedure and plan pays all remaining expenses.

⁴ Reimbursement arrangement is the coinsurance provision used for all covered expenses under the plan.

⁵ Includes plans which paid the full cost.

⁶ Less than 0.5 percent.

⁷ Excludes plans which limited coverage to accidental injuries, removal of impacted wisdom teeth, or repair of jaw.

⁸ Participants were included as having coverage for orthodontia in cases where benefits were limited to children.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 48. Health care benefits: Percent of full-time participants in plans with dental benefits by deductible provision¹, medium and large firms, 1988

Type of deductible ²	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Subject to separate dental deductible ³	66	70	72	61
Yearly deductible only	56	60	59	52
Under \$25	1	1	1	(⁴)
\$25	24	25	23	24
\$26-\$49	1	1	1	(⁴)
\$50	28	29	30	25
\$51-\$99	1	2	2	(⁴)
\$100	2	2	2	1
Over \$100	(⁴)	(⁴)	(⁴)	(⁴)
Lifetime deductible only	5	4	5	5
Less than \$50	(⁴)	(⁴)	(⁴)	(⁴)
\$50	4	3	4	4
Over \$50	1	(⁴)	(⁴)	1
Both yearly and lifetime deductibles	6	6	8	4
Subject to overall plan deductible	3	3	2	2
No deductible	31	27	26	37

¹ Excludes separate deductibles for orthodontic procedures.

² Amount of deductible described is for each insured person. In some plans, the individual and family deductibles are identical.

³ Deductibles may not apply to all covered dental procedures. If separate deductibles applied to different procedures, the sum of the deductible amounts was tabulated.

⁴ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 49. Health care benefits: Percent of full-time participants in plans with dental benefits by yearly maximum amount of coverage¹, medium and large firms, 1988

Dollar amount ²	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Yearly maximum specified ³	87	85	87	88
Less than \$500	1	1	1	1
\$500	5	3	5	6
\$501-\$749	1	1	1	(⁴)
\$750	13	12	11	15
\$751-\$999	2	2	2	2
\$1,000	48	48	45	49
\$1,001-\$1,499	3	3	3	2
\$1,500	10	11	13	7
\$1,501-\$1,999	(⁴)	1	(⁴)	(⁴)
\$2,000	2	2	3	2
\$2,001-\$2,999	1	1	1	1
\$3,000 or more	2	2	2	2
No yearly maximum	13	15	13	12
Maximum provision not determinable	(⁴)	-	-	(⁴)

¹ Includes all covered dental procedures except orthodontia. Amount of maximum specified is for each insured person.

² Coverage for dental procedures may also be subject to scheduled allowance, deductible, or coinsurance provisions in addition to maximum dollar limitations.

³ If separate yearly maximums applied to different procedures, the sum of the maximums was tabulated. Maximums applied to dental expenses only.

⁴ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 50. Health care benefits: Percent of full-time participants in plans with orthodontic benefits by lifetime maximum amount of coverage, medium and large firms, 1988

Dollar amount ¹	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Lifetime maximum specified	90	90	89	91
Less than \$500	(²)	-	-	1
\$500	11	11	10	13
\$501-\$749	3	3	3	4
\$750	14	15	16	12
\$751-\$999	7	6	5	10
\$1,000	38	40	39	37
\$1,001-\$1,499	4	5	4	4
\$1,500	7	6	6	7
Greater than \$1,500	4	4	5	2
No lifetime maximum	10	10	11	9

¹ Coverage for dental procedures may also be subject to scheduled allowance, deductible, or coinsurance provisions in addition to maximum dollar limitations.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 51. Health care benefits: Percent of full-time participants in plans with dental benefits by provision for preauthorization of treatment, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Preauthorization required	67	69	69	63
Minimum expense requiring preauthorization:				
\$100	18	19	17	18
\$101 - \$199	11	13	10	11
\$200	16	15	16	16
Greater than \$200	14	15	16	12
Dollar amount not determinable	7	8	10	6
Preauthorization not required	33	31	31	37

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 52. Health care benefits: Percent of full-time participants in plans with vision benefits by extent of coverage for selected benefits, medium and large firms, 1988

Type of vision benefit	Total	Covered	Covered in full	Subject to internal limits				Subject to overall limitations only	Not covered	Not determinable
				Total ¹	Scheduled allowance	Coinsurance	Copayment			
All participants										
Examinations	100	100	33	61	32	4	29	6	(²)	(²)
Eyeglasses	100	67	7	59	41	7	15	(²)	33	-
Contact lenses ³	100	58	3	54	48	5	2	1	37	4
Professional and administrative										
Examinations	100 ⁴	100	34	60	29	4	31	5	(²)	(²)
Eyeglasses	100	62	6	56	41	7	14	(²)	38	-
Contact lenses ³	100	54	3	50	44	5	2	1	43	4
Technical and clerical										
Examinations	100	100	34	61	31	6	27	5	(²)	(²)
Eyeglasses	100	63	5	58	41	8	13	1	37	-
Contact lenses ³	100	54	2	51	43	7	2	1	40	5
Production and service										
Examinations	100	100	31	62	33	3	28	7	(²)	(²)
Eyeglasses	100	72	10	61	42	6	16	(²)	28	-
Contact lenses ³	100	64	4	59	53	5	1	1	32	4

¹ The total is less than the sum of the individual items because workers may participate in plans with more than one type of limitation.

² Less than 0.5 percent.

³ Includes plans where coverage was subject to special conditions,

for example, following cataract surgery.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 53. Health care benefits: Percent of full-time participants in medical plans¹ by type of plan and coverage for selected special benefits, medium and large firms, 1988

Benefit item	All plans	Health maintenance organizations	Non-health maintenance organizations
All participants			
Hearing care ²	27	96	11
Orthoptics ³	2	(*)	2
Hospice care	38	20	42
Routine physical examinations	28	99	11
Organ transplant	20	25	19
Well-baby care	31	98	15
Immunization and inoculation	29	99	13
Professional and administrative			
Hearing care ²	29	96	10
Orthoptics ³	2	(*)	3
Hospice care	41	21	47
Routine physical examinations	31	99	12
Organ transplant	20	26	19
Well-baby care	35	98	17
Immunization and inoculation	31	99	12
Technical and clerical			
Hearing care ²	27	96	8
Orthoptics ³	2	(*)	3
Hospice care	38	18	43
Routine physical examinations	29	99	10
Organ transplant	20	24	19
Well-baby care	35	98	18
Immunization and inoculation	30	99	11
Production and service			
Hearing care ²	25	97	12
Orthoptics ³	1	(*)	2
Hospice care	36	21	38
Routine physical examinations	25	99	12
Organ transplant	20	24	20
Well-baby care	26	99	13
Immunization and inoculation	27	99	14

¹ Plans providing services or payments for services rendered in the hospital or by a physician. Excludes plans that provided only dental, vision, or prescription drug coverage.

² Plan provides, as a minimum, coverage for hearing examination expenses.

ing examination expenses.

³ Exercises to improve the function of the eye muscles.

⁴ Less than 0.5 percent.

Table 54. Health care benefits: Percent of full-time participants in medical plans by coverage with selected cost containment features, medium and large firms, 1988

Cost containment feature	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants	Cost containment feature	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
All medical plans¹					Fee-for-service plans—Continued				
Higher rate of payment for generic prescription drugs	10	10	10	10	Incentive for prehospitalization testing	51	54	58	46
Higher rate of payment for mail order drugs	7	8	7	7	Prehospital admission certification requirement	37	41	40	35
No or limited reimbursement for nonemergency weekend admission to hospital	11	11	11	12	Higher rate of payment for delivery at birthing center	20	23	23	18
Separate deductible for hospital admission	9	9	8	10	Incentive to audit hospital statement	9	9	10	8
Incentive for prehospitalization testing	43	44	47	40	Health maintenance organizations				
Prehospital admission certification requirement	33	34	33	32	Higher rate of payment for generic prescription drugs	4	3	3	6
Higher rate of payment for delivery at birthing center	17	18	18	17	Higher rate of payment for mail order drugs	5	5	5	5
Incentive to audit hospital statement	7	7	8	7	No or limited reimbursement for nonemergency weekend admission to hospital	(²)	(²)	(²)	(²)
Fee-for-service plans					Separate deductible for hospital admission	4	4	4	4
Higher rate of payment for generic prescription drugs	10	10	11	10	Incentive for prehospitalization testing	6	8	6	4
Higher rate of payment for mail order drugs	8	9	8	8	Prehospital admission certification requirement	2	2	3	2
No or limited reimbursement for nonemergency weekend admission to hospital	14	14	14	13	Higher rate of payment for delivery at birthing center	1	1	1	2
Separate deductible for hospital admission	10	11	9	10	Incentive to audit hospital statement	(²)	(²)	(²)	-

¹ Data were insufficient to show preferred provider and exclusive provider organizations separately.

² Less than 0.5 percent.

NOTE: Dash indicates no employees in this category.

Table 55. Health care benefits: Percent of full-time participants in health maintenance organizations by selected plan features, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Extended care facilities				
Total	100	100	100	100
Provided coverage	88	88	88	87
Limited number of days	50	51	50	48
Unlimited number of days	38	38	38	38
Not provided coverage	12	12	12	13
Physician's office visits				
Total	100	100	100	100
Provided coverage	100	100	100	100
Subject to copayment per visit	54	53	54	54
\$1 per visit	2	2	3	1
\$2 per visit	11	9	11	13
\$3 per visit	15	15	16	14
\$4 per visit	3	3	3	2
\$5 per visit	20	21	19	19
More than \$5 per visit	4	3	2	6
Subject to other limits ¹	(²)	(²)	(²)	(²)
Covered in full	46	46	46	46
Outpatient prescription drugs				
Total	100	100	100	100
Provided coverage	83	85	83	81
Subject to a copayment per prescription	69	69	70	67
Less than \$1 per prescription	(²)	(²)	(²)	-
\$1 - \$1.99 per prescription	6	6	5	6
\$2 - \$2.99 per prescription	14	16	18	11
\$3 - \$3.99 per prescription	33	31	33	36
\$4 - \$4.99 per prescription	7	7	8	6
\$5 or more per prescription	9	10	7	9
Subject to other limits ¹	7	8	7	6
Covered in full	7	7	6	7
Not provided coverage	17	15	17	19

¹ Includes plans that require participants to pay a percentage of the charges incurred.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 56. Health care benefits: Percent of full-time participants in contributory medical plans¹ by type and amount of employee contribution, medium and large firms, 1988

Type and amount of contribution	All plans		Health maintenance organizations		Non-health maintenance organizations	
	Single coverage	Family coverage ²	Single coverage	Family coverage ²	Single coverage	Family coverage ²
All participants						
Total	100	100	100	100	100	100
Flat monthly amount	93	93	96	95	91	92
Less than \$5.00	9	1	10	(³)	9	1
\$5.00-\$9.99	17	5	22	4	15	6
\$10.00-\$14.99	14	3	11	5	15	3
\$15.00-\$19.99	16	6	17	5	15	7
\$20.00-\$29.99	17	12	17	12	17	12
\$30.00-\$39.99	6	10	7	8	6	11
\$40.00-\$49.99	3	6	3	8	3	5
\$50.00-\$59.99	1	7	3	6	1	8
\$60.00-\$69.99	(³)	7	(³)	6	(³)	8
\$70.00-\$79.99	(³)	5	1	6	(³)	5
\$80.00-\$89.99	1	5	(³)	4	1	5
\$90.00-\$99.99	1	4	(³)	4	1	4
\$100.00-\$124.99	1	7	(³)	10	1	7
\$125.00-\$149.99	-	4	-	6	-	3
\$150.00-\$174.99	-	2	-	3	-	2
\$175.00-\$199.99	-	2	-	3	-	1
\$200.00 or greater	-	1	-	(³)	-	1
Composite rate ⁴	6	5	5	4	7	5
Amount varies by employee ⁵	3	2	1	1	4	3
Amount varies by earnings	-	(³)	-	-	-	(³)
Not determinable	4	5	3	4	5	5
Professional and administrative						
Total	100	100	100	100	100	100
Flat monthly amount	92	92	96	95	91	92
Less than \$5.00	10	1	6	(³)	11	1
\$5.00-\$9.99	18	5	21	2	17	6
\$10.00-\$14.99	15	4	12	5	16	3
\$15.00-\$19.99	14	7	18	6	13	8
\$20.00-\$29.99	17	13	19	12	16	13
\$30.00-\$39.99	7	11	8	8	7	11
\$40.00-\$49.99	3	6	4	8	3	6
\$50.00-\$59.99	1	7	3	6	1	8
\$60.00-\$69.99	1	7	(³)	6	1	7
\$70.00-\$79.99	1	5	1	7	(³)	4
\$80.00-\$89.99	(³)	4	(³)	4	(³)	4
\$90.00-\$99.99	1	3	(³)	5	1	3
\$100.00-\$124.99	(³)	7	(³)	9	(³)	7
\$125.00-\$149.99	-	3	-	6	-	2
\$150.00-\$174.99	-	1	-	3	-	1
\$175.00-\$199.99	-	2	-	4	-	1
\$200.00 or greater	-	2	-	1	-	2
Composite rate ⁴	5	4	5	4	5	4
Amount varies by employee ⁵	4	2	2	1	4	3
Amount varies by earnings	-	(³)	-	-	-	(³)
Not determinable	4	5	2	4	5	5
Technical and clerical						
Total	100	100	100	100	100	100
Flat monthly amount	90	91	96	96	88	90
Less than \$5.00	7	1	4	(³)	9	1
\$5.00-\$9.99	16	4	20	1	14	5

See footnotes at end of table.

Table 56. Health care benefits: Percent of full-time participants in contributory medical plans¹ by type and amount of employee contribution, medium and large firms, 1988—Continued

Type and amount of contribution	All plans		Health maintenance organizations		Non-health maintenance organizations	
	Single coverage	Family coverage ²	Single coverage	Family coverage ²	Single coverage	Family coverage ²
Technical and clerical						
—Continued						
\$10.00-\$14.99	14	3	15	4	14	2
\$15.00-\$19.99	16	5	18	4	16	6
\$20.00-\$29.99	18	10	18	10	18	9
\$30.00-\$39.99	9	11	10	10	8	11
\$40.00-\$49.99	4	6	4	9	4	5
\$50.00-\$59.99	1	8	1	7	1	9
\$60.00-\$69.99	(³)	9	1	5	(³)	10
\$70.00-\$79.99	(³)	5	(³)	6	(³)	5
\$80.00-\$89.99	(³)	5	(³)	6	(³)	5
\$90.00-\$99.99	(³)	4	(³)	5	1	4
\$100.00-\$124.99	(³)	8	(³)	10	(³)	7
\$125.00-\$149.99	-	5	-	8	-	4
\$150.00-\$174.99	-	2	-	4	-	2
\$175.00-\$199.99	-	1	-	3	-	1
\$200.00 or greater	-	1	-	(³)	-	1
Composite rate ⁴	4	4	5	4	4	3
Amount varies by employee ⁵	6	4	2	2	7	5
Amount varies by earnings	-	(³)	-	-	-	(³)
Not determinable	4	4	2	2	4	5
Production and service						
Total	100	100	100	100	100	100
Flat monthly amount	94	94	96	95	94	94
Less than \$5.00	10	2	18	(³)	7	2
\$5.00-\$9.99	17	6	24	7	15	6
\$10.00-\$14.99	14	3	8	7	16	3
\$15.00-\$19.99	16	6	17	6	16	6
\$20.00-\$29.99	17	13	14	14	18	13
\$30.00-\$39.99	5	10	4	8	5	11
\$40.00-\$49.99	2	5	3	6	2	5
\$50.00-\$59.99	2	7	4	5	1	7
\$60.00-\$69.99	(³)	7	(³)	7	(³)	7
\$70.00-\$79.99	(³)	5	(³)	5	(³)	5
\$80.00-\$89.99	2	5	(³)	2	3	5
\$90.00-\$99.99	(³)	4	-	4	(³)	4
\$100.00-\$124.99	1	7	-	12	1	6
\$125.00-\$149.99	-	3	-	5	-	3
\$150.00-\$174.99	-	2	-	2	-	2
\$175.00-\$199.99	-	1	-	2	-	1
\$200.00 or greater	-	1	-	(³)	-	1
Composite rate ⁴	9	7	4	3	10	7
Amount varies by employee ⁵	1	1	(³)	(³)	1	1
Amount varies by earnings	-	(³)	-	-	-	(³)
Not determinable	5	5	3	5	5	5

¹ Plans providing services or payments for services rendered in the hospital or by a physician. Excludes plans that provided only dental, vision, or prescription drug coverage.

² If the amount of contribution varied by either size or composition of family, the rate for an employee with a spouse and one child was used. For a small percentage of employees, the employee contributes the same amount for single and family coverage.

³ Less than 0.5 percent.

⁴ A composite rate is a set contribution covering more than one benefit area, for example, health insurance and sickness and accident insurance. Cost data for individual plans cannot be determined.

⁵ Amount varies by options selected under a "cafeteria plan" or balance of employer-sponsored reimbursement account.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 57. Health care benefits: Percent of full-time participants in contributory stand-alone dental plans¹ by type and amount of employee contribution, medium and large firms, 1988

Type and amount of contribution	Single coverage	Family coverage ²	Type and amount of contribution	Single coverage	Family coverage ²
All participants			Technical and clerical		
Total	100	100	Total	100	100
Flat monthly amount	83	83	Flat monthly amount	80	81
Less than \$2.00	18	(³)	Less than \$2.00	15	(³)
\$2.00-\$4.99	39	12	\$2.00-\$4.99	40	10
\$5.00-\$9.99	18	25	\$5.00-\$9.99	17	26
\$10.00-\$14.99	3	22	\$10.00-\$14.99	3	22
\$15.00-\$19.99	(³)	8	\$15.00-\$19.99	(³)	6
\$20.00-\$24.99	3	4	\$20.00-\$24.99	3	3
\$25.00 or greater	-	10	\$25.00 or greater	-	11
Composite rate ⁴	2	2	Composite rate ⁴	2	2
Amount varies by employee ⁵	10	7	Amount varies by employee ⁵	14	10
Not determinable	8	10	Not determinable	6	8
Professional and administrative			Production and service		
Total	100	100	Total	100	100
Flat monthly amount	81	83	Flat monthly amount	88	86
Less than \$2.00	15	(³)	Less than \$2.00	24	1
\$2.00-\$4.99	40	10	\$2.00-\$4.99	35	16
\$5.00-\$9.99	18	27	\$5.00-\$9.99	22	23
\$10.00-\$14.99	3	23	\$10.00-\$14.99	4	21
\$15.00-\$19.99	(³)	8	\$15.00-\$19.99	-	8
\$20.00-\$24.99	3	4	\$20.00-\$24.99	1	6
\$25.00 or greater	-	9	\$25.00 or greater	-	10
Composite rate ⁴	2	2	Composite rate ⁴	2	1
Amount varies by employee ⁵	11	8	Amount varies by employee ⁵	4	2
Not determinable	8	9	Not determinable	9	12

¹ Plans that exclusively provide dental benefits.

² If the amount of contribution varied by either size or composition of family, the rate for an employee with a spouse and one child was used. For a small percentage of employees, the employee contributes the same amount for single and family coverage.

³ Less than 0.5 percent.

⁴ A composite rate is a set contribution covering more than one benefit

area, for example, health insurance and sickness and accident insurance. Cost data for individual plans cannot be determined.

⁵ Amount varies by options selected under a "cafeteria plan" or balance of employer-sponsored reimbursement account.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 58. Health care benefits: Percent of full-time participants by length-of-service requirements for participation,¹ medium and large firms, 1988

Length-of-service requirement	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
With service requirement	45	36	42	52
1 month	13	11	13	14
2 months	7	5	4	9
3 months	20	15	20	24
4-5 months	1	1	1	1
6 months	3	3	3	4
7-11 months	1	1	1	1
1 year	(²)	(²)	(²)	(²)
Without service requirement	40	48	43	33
Service requirement not determinable	15	16	16	14
Not applicable—plan not available to new employees	(²)	(²)	(²)	(²)

¹ Length of time employees must be on the job before they are covered by a plan that is at least partially employer financed. There is frequently an administrative time lag between completion of the requirement and the actual start of participation. If the lag was 1 month or more, it was included in the service requirement. Minimum age requirements are rare.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 59. Health care benefits: Percent of full-time participants in medical plans¹ by provision for coverage after retirement, medium and large firms, 1988

Provision	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
With employer-financed retiree coverage ²	45	49	47	43
For retirees under age 65 only	9	7	7	11
For retirees 65 and over only	1	1	1	1
For all retirees	36	41	39	31
Benefits cancelled on retirement or financed wholly by retiree	54	51	53	56
Data not available	1	(²)	(²)	1

¹ Plans providing services or payments for services rendered in the hospital or by a physician. Excludes plans that provided only dental, vision, or prescription drug coverage.

² Includes plans financed wholly by employers and plans financed jointly by employers and employees.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 60. Health care benefits: Percent of full-time participants in medical plans¹ by provisions for benefits after retirement, medium and large firms, 1988

Characteristic	All participants		Professional and administrative participants		Technical and clerical participants		Production and service participants	
	Retiree under 65 ²	Retiree 65 and over	Retiree under 65 ²	Retiree 65 and over	Retiree under 65 ²	Retiree 65 and over	Retiree under 65 ²	Retiree 65 and over
Percent of participants with employer-financed retiree coverage ³	45	37	48	42	46	40	42	33
Benefit level⁴								
Total	100	100	100	100	100	100	100	100
No change in coverage	89	85	91	88	88	85	87	83
Reduced coverage	9	13	7	11	11	14	10	14
Increased coverage	1	1	1	1	1	1	1	1
Not determinable	1	1	(⁵)	(⁵)	(⁵)	(⁵)	2	2
Duration of coverage								
Total	100	100	100	100	100	100	100	100
Continues indefinitely	-	98	-	98	-	99	-	97
Ceases during retirement	1	1	1	1	1	(⁵)	1	(⁵)
Continues to age 65	96	-	98	-	99	-	97	-
Not determinable	1	2	1	1	1	1	2	3
Financing								
Total	100	100	100	100	100	100	100	100
Retiree pays some cost	46	44	51	46	52	46	40	41
Retiree pays no cost	53	55	49	54	48	53	58	57
Not determinable	1	1	(⁵)	(⁵)	(⁵)	(⁵)	2	2

¹ Plans providing services or payments for services rendered in the hospital or by a physician. Excludes plans that provided only dental, vision, or prescription drug coverage.

² Provisions in this column apply to the period between retirement and age 65.

³ This tabulation shows covered workers as a percent of all participants in plans with employer-financed group insurance for retirees under age 65, those 65 and over, or both groups. It covers plans in which insurance was continued for longer than 1 month after retirement. It ex-

cludes plans that provide only the retiree's share of premiums for medical insurance under Medicare (Part B).

⁴ For retirees eligible for Medicare, benefits may be calculated and reduced by the extent to which covered expenses are reimbursed by the Federal program.

⁵ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 61. Health care benefits: Percent of full-time participants in medical plans by provision for employer-financed coverage during layoff, medium and large firms, 1988

Benefit provision	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
With employer-financed coverage ¹ ..	25	25	22	27
Employee share of cost: ²				
Partial cost	8	8	8	8
No cost	16	16	14	18
Cost not determinable	1	1	1	1
Duration of coverage: ³				
1-2 months	5	6	4	6
3 months	5	4	5	5
4-5 months	1	(⁴)	(⁴)	2
6 months	3	3	3	3
7-11 months	(⁴)	(⁴)	(⁴)	(⁴)
1 year	3	2	2	2
Over 1 year	3	2	1	3
Varies by service	1	1	2	1
Until rehire	1	1	2	1
Not determinable	4	4	5	3
Without employer-financed coverage	74	74	77	73
No policy established	(⁴)	(⁴)	(⁴)	(⁴)
Layoff policy not determinable	(⁴)	1	1	(⁴)

¹ Plans providing services or payments for services rendered in the hospital or by a physician. Excludes plans that provided only dental, vision, or prescription drug coverage.

² Administrative costs were excluded from the tabulations.

³ Provision applies to the continuation of employee coverage immediately upon layoff. In some plans, group coverage was extended beyond the length-of-continuation periods reported, but was financed solely by the laid-off employee.

⁴ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 62. Life insurance: Percent of full-time participants by method of determining amount of basic life insurance and frequency of related coverages, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Basic life insurance ¹	100	100	100	100
Based on earnings	66	80	78	50
Multiple ²	58	75	73	41
Graduated schedule	7	5	5	10
Flat amount	31	17	19	46
Flat amount based on service	3	2	2	3
Flat amount based on age	(³)	(³)	(³)	(³)
With accidental death and dismemberment coverage	76	72	72	80
With survivor income benefit ⁴	8	7	5	9
With availability of partly employer-financed supplemental life insurance	10	11	11	8
With dependent coverage	18	18	20	17

¹ A few participants received only accidental death and dismemberment insurance.

² Includes participants in plans in which insurance equaled a multiple of earnings, plus or minus a specific amount.

³ Less than 0.5 percent.

⁴ Consists of monthly income, usually a percent of earnings, for the spouse or dependent children for a specified period after death of employee.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 63. Life insurance: Percent of full-time participants in plans with multiple-of-earnings formulas¹ by amount of basic insurance and maximum coverage provisions, medium and large firms, 1988

Formula	Total	In plans without maximum coverage	In plans with maximum coverage					
			All	Less than \$50,000	\$50,000-\$99,999	\$100,000-\$249,999	\$250,000-\$499,999	\$500,000 or more
All participants								
Total	100	40	60	2	11	25	15	8
Life insurance is equal to annual earnings times: ²								
Less than 1.0	4	2	2	-	1	1	(³)	(³)
1.0	50	21	28	2	5	13	5	3
1.1-1.4	1	(³)	(³)	-	-	(³)	-	-
1.5	7	2	5	-	1	2	1	1
1.6-1.9	1	-	1	-	-	1	-	-
2.0	31	13	17	-	2	6	6	3
2.1-2.4	(³)	-	(³)	-	-	-	(³)	(³)
2.5	3	(³)	2	-	(³)	(³)	1	(³)
2.6-2.9	1	-	1	-	1	-	-	-
3.0	3	1	2	-	-	(³)	1	1
More than 3.0	1	(³)	1	-	-	(³)	(³)	(³)
Multiple varying with earnings	1	(³)	1	-	-	(³)	(³)	(³)
Professional and administrative								
Total	100	38	62	1	12	24	15	10
Life insurance is equal to annual earnings times: ²								
Less than 1.0	4	2	2	-	1	1	(³)	(³)
1.0	47	20	27	1	6	12	5	4
1.1-1.4	(³)	-	(³)	-	-	(³)	-	-
1.5	8	2	6	-	1	2	2	1
1.6-1.9	1	-	1	-	-	1	-	-
2.0	32	14	18	-	3	6	6	3
2.1-2.4	1	-	1	-	-	-	(³)	(³)
2.5	3	1	2	-	(³)	(³)	1	1
2.6-2.9	1	-	1	-	1	-	-	-
3.0	2	1	2	-	-	1	1	1
More than 3.0	1	(³)	1	-	-	(³)	(³)	(³)
Multiple varying with earnings	1	(³)	1	-	-	(³)	(³)	(³)
Technical and clerical								
Total	100	35	65	2	11	27	15	10
Life insurance is equal to annual earnings times: ²								
Less than 1.0	4	1	3	-	1	2	(³)	(³)
1.0	50	20	30	2	5	14	6	3
1.1-1.4	1	(³)	1	-	-	1	-	-
1.5	6	1	5	-	1	2	1	1
1.6-1.9	1	-	1	-	-	1	-	-
2.0	29	11	18	-	2	6	6	4
2.1-2.4	(³)	-	(³)	-	-	-	(³)	(³)
2.5	3	(³)	3	-	1	(³)	1	1
2.6-2.9	(³)	-	(³)	-	(³)	-	-	-
3.0	3	(³)	3	-	-	(³)	1	1
More than 3.0	1	(³)	1	-	-	(³)	1	(³)
Multiple varying with earnings	1	(³)	1	-	-	1	(³)	(³)

See footnotes at end of table.

Table 63. Life insurance: Percent of full-time participants in plans with multiple-of-earnings formulas¹ by amount of basic insurance and maximum coverage provisions, medium and large firms, 1988—Continued

Formula	Total	In plans without maximum coverage	In plans with maximum coverage					
			All	Less than \$50,000	\$50,000-\$99,999	\$100,000-\$249,999	\$250,000-\$499,999	\$500,000 or more
Production and service								
Total	100	46	54	3	9	23	13	5
Life insurance is equal to annual earnings times: ²								
Less than 1.0	3	2	1	-	(³)	(³)	(³)	(³)
1.0	52	24	28	3	5	13	5	3
1.1-1.4	(³)	(³)	(³)	-	-	(³)	-	-
1.5	7	2	5	-	2	2	1	(³)
2.0	31	15	18	-	1	7	5	2
2.5	2	-	2	-	1	1	1	-
2.6-2.9	1	-	1	-	1	-	-	-
3.0	3	2	1	-	-	(³)	(³)	(³)
More than 3.0	1	1	(³)	-	-	(³)	(³)	(³)
Multiple varying with earnings	1	(³)	(³)	-	-	(³)	(³)	(³)

¹ Includes participants in plans in which insurance equaled a multiple of earnings, plus or minus a specific amount. In such cases, only the multiple of earnings was included in the tabulation.

² When the multiple-of-earnings formula varied with age, the maximum multiple was tabulated. A few plans varied the multiple-of-earnings formula according to service; in these

cases, a participant was assumed to have 15 years of service.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 64. Life insurance: Percent of full-time participants in plans with flat dollar insurance¹ by amount of basic insurance, medium and large firms, 1988

Amount of insurance	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Less than \$2,000	1	(²)	1	1
\$2,000-\$4,999	10	10	11	10
\$5,000-\$9,999	28	24	31	28
\$10,000-\$14,999	40	35	38	41
\$15,000-\$19,999	9	9	7	10
\$20,000-\$24,999	6	11	5	5
\$25,000-\$29,999	3	4	2	3
\$30,000-\$49,999	1	1	1	1
\$50,000-\$99,999	1	5	2	(²)
\$100,000 and over	(²)	1	1	(²)

¹ Excludes participants in plans where insurance was a flat amount based on service or age.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 65. Life insurance: Percent of full-time participants by provisions for age-related reduction of basic life insurance benefits for current employees, medium and large firms, 1988

Provision	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Life insurance changes	56	58	61	52
Life insurance reduced	56	57	61	52
Reduction begins at:				
Age 60 or before	2	2	1	2
Ages 61 to 64	1	1	2	1
Age 65	32	35	33	29
Ages 66 to 69	3	2	3	3
Age 70	18	17	21	18
Age 71 or later	(¹)	1	(¹)	(¹)
Reduction in maximum life insurance benefits	(¹)	(¹)	(¹)	(¹)
Life insurance benefits do not change	44	42	39	48

¹ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 66. Life insurance: Percent of full-time participants by length-of-service requirements for participation,¹ medium and large firms, 1988

Length-of-service requirement	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
With service requirement	55	47	55	61
1 month	16	16	17	16
2 months	6	5	4	8
3 months	22	16	23	25
4-5 months	1	(²)	(²)	2
6 months	7	6	7	7
7-11 months	(²)	(²)	(²)	1
1 year	3	3	3	2
Over 1 year	(²)	(²)	-	(²)
Without service requirement	44	53	44	38
Service requirement not determinable	(²)	(²)	1	(²)
Not applicable—plan not available to new employees	(²)	(²)	(²)	(²)

¹ Length of time employees must be on the job before they are covered by a plan that is at least partially employer financed. There is frequently an administrative time lag between completion of the requirement and the actual start of participation. If the lag was 1 month or more, it was included in the service requirement. Minimum age requirements are rare.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 67. Life insurance: Percent of full-time participants with dependent coverage by type and amount of coverage, medium and large firms, 1988

Type and amount of coverage	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Death of spouse	100	100	100	100
Flat benefit	89	86	82	95
Less than \$1,000	(¹)	-	(¹)	1
\$1,000	29	20	19	41
\$1,500	3	5	5	1
\$2,000	16	14	13	19
\$2,500	5	4	6	5
\$3,000	3	2	4	4
\$4,000	2	2	1	3
\$5,000	24	29	27	19
More than \$5,000	6	9	9	1
Benefit varies	10	13	14	5
By age of spouse	1	1	1	-
By employee earnings	(¹)	1	(¹)	1
By employee option	9	12	13	5
Amount of coverage not determinable	1	1	3	-
Death of child	99	99	99	99
Flat benefit	71	71	67	72
Less than \$1,000	4	2	1	8
\$1,000	28	20	22	37
\$1,500	4	8	5	1
\$2,000	18	21	21	15
\$2,500	6	6	9	4
\$3,000	2	3	2	1
\$4,000	3	2	2	4
\$4,001 to \$4,999	1	1	1	-
\$5,000	5	7	4	4
Benefit varies	28	28	32	26
By age of child ²	21	19	20	23
By employee option	7	9	12	3
Amount of coverage not determinable	(¹)	(¹)	(¹)	-
Insurance on child not provided	1	1	1	1

¹ Less than 0.5 percent.

² Amount of insurance increases at some point after 1 year of age.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 68. Life insurance: Percent of full-time participants by effect of retirement on basic life insurance coverage, medium and large firms, 1988

Effect of retirement	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Insurance continues ¹	49	50	50	47
Continues for life	46	47	46	44
Continues in full	2	2	2	2
Reduced during retirement	44	46	44	42
Once	24	24	25	24
More than once	19	21	19	18
Continues in form of paid-up insurance ²	(³)	(³)	(³)	(³)
Ceases during retirement	1	2	3	1
Provision not determinable	2	1	2	2
Insurance discontinued immediately	51	50	50	53

¹ Includes plans in which coverage is fully paid by retiree.

² Plan either accumulates permanent amounts of insurance through the contributions of active employees, or provides benefit through a single premium paid by employer.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Chapter 6. Defined Benefit Pension Plans

Defined benefit pension plans calculate retirement benefits using specific formulas, generally based on salary, years of service with a firm, or both. Employers are obligated to provide the benefits derived from these calculations. In 1988, 63 percent of employees in medium and large firms participated in defined benefit pension plans, down from 76 percent in 1986. About half of this decline resulted from the expanded scope of the Employee Benefits Survey; the newly covered smaller firms and service industries were less likely to offer defined benefit pension plans than were larger firms and those in industries studied in earlier years. The other half of the decline continues a trend reported over several years by the survey.

To evaluate the full extent of retirement benefits available to employees in medium and large firms, defined contribution plans also must be considered. These plans, which specify employer and, if applicable, employee contributions, but do not guarantee a specific benefit, are discussed in the next chapter.

The Employee Benefits Survey studied a variety of defined benefit pension plan provisions. The provisions examined included: Formulas for calculating benefits, how benefits are coordinated with Social Security payments, ceilings on benefit payments, age and service requirements for retirement, disability retirement, benefit accruals for older workers, postretirement pension increases, vesting schedules, survivor annuities, employee contributions, and plan participation requirements. To summarize the overall effect of many of these provisions, pension benefits and replacement rates (the proportion of preretirement income replaced by pension payments) were computed for workers with several assumed levels of earnings and years of service. Each of these topics is discussed in the following sections.

Benefit formulas

Earnings-based formulas applied to 72 percent of the employees covered by defined benefit pension plans (tables 69-74). Such formulas pay a percent of the employee's annual earnings per year of service (for example, 1.5 percent of earnings times 30 years of service, or 45 percent of annual earnings).

Variations are common, however, in the approach to calculating annual earnings and the rate paid per year of service. For 76 percent of the participants with earnings formulas, pensions were based on earnings in the final years

of employment (terminal earnings formula); for the remainder, an average of career earnings was used (career earnings formula).

Terminal earnings were defined as the average over a 5-year period for 82 percent of the participants with terminal-earnings formulas. Such formulas usually designated the 5 consecutive years with the highest earnings out of the last 10 years before retirement.

Formulas based on terminal earnings typically provided participants with a flat percent of earnings per year of service. These flat rates generally ranged from 1 to 2 percent of earnings and averaged 1.61 percent per year of service.

Three-fifths of the participants in plans using formulas based on career earnings had benefit formulas that varied according to service, earnings, age, or a combination of factors. For example, a plan will credit an employee with 1 percent of earnings up to the first \$12,000 in each year of service plus 1.5 percent of the earnings exceeding that amount. The annual pension payment is the sum of these credits. (This is often done to lower employer costs for wage levels upon which Social Security taxes are paid, as described in the next section.) Where career earnings formulas specified a uniform percent for each year of service, the average was 1.55 percent.

It is difficult to judge whether terminal or career earnings formula plans provide the more generous pension payment because different variables go into computing benefits. For example, average earnings will generally be lower for career-earnings formulas,²⁰ but these benefits are less likely to be offset by a retiree's Social Security payments. (See next section.) Similarly, the average flat rate per year of service was slightly higher for terminal earnings formulas than for career earnings formulas, but the former imposed a maximum on years of service to be included in calculating benefits much more often than the latter. (See maximum benefits, below.)

The earnings that are used in computing both terminal and career earnings formula pension benefits are similar. Nearly half the participants were in plans that included only "basic" earnings, that is, straight-time earnings. The remainder had additional earnings included in the benefit calculation, such

²⁰ An employee who worked 30 years with a 5-percent pay increase each year and who earned \$25,000 in the last year of service would have career average earnings of \$13,451 a year, while the final 5-year average would be \$22,730. The difference between the career and final averages lessens with shorter lengths of service.

as overtime pay and shift differentials.

Most plans that did not use a percent-of-earnings benefit formula specified a dollar amount to be paid for each year of service, such as \$15 monthly per year of service, yielding a pension of \$450 a month after 30 years. Dollar-amount formulas applied to one-fourth of pension plan participants. While the dollar amount in these formulas sometimes varied with an employee's earnings or service, the predominant method was to multiply a uniform dollar amount by years of service. In 1988, uniform amounts credited per year averaged \$18.15 a month, an increase of nearly \$3 per year over the 1986 average.

The basis of pension payments differed sharply by employee group. While a large majority of white-collar participants were provided earnings-based pensions, dollar-amount formulas applied to nearly half of the blue-collar participants.

Two additional types of defined benefit pension plan formulas accounted for the remaining participants. Percent-of-contribution formulas specify a periodic contribution by an employer, and occasionally an employee, to a plan. Benefits are a percent of total contributions, for example, 1 percent of total contributions per month. If career contributions totaled \$40,000, monthly pension benefits would equal \$400. Similarly, cash account pension plans specify an employer contribution and a rate of interest on that contribution. Benefits are computed as a percent of each employee's account balance. While both types of pension formula have features that resemble defined contribution plans, the fact that a certain level of benefits is guaranteed by the employer leads to their classification as defined benefit plans by the Internal Revenue Service.

Thirty-three percent of all pension plan participants were eligible to receive benefits from either primary or alternative formulas, whichever was greater. Alternative formulas were often included to provide at least a minimum level of benefits for persons with short service or low earnings. For example, a plan may have a primary formula of 1.25 percent of average career earnings times years of service, and an alternative formula of \$15 a month for each year of service. In this case, the alternative formula would provide a higher benefit for persons with average career earnings of less than \$14,400 a year.

Private benefits and Social Security payments

Employers providing private retirement plans also share the cost of Social Security coverage equally with their employees (table 75). Because many plan sponsors feel that private pension and Social Security benefits should not be duplicative, formulas for calculating private pensions often contain an offset provision requiring part of the Social Security pension to be subtracted from the annuity.

Social Security offsets are generally applied immediately upon retirement, whether or not the retiree is eligible for Social Security benefits. (Only 7 percent of participants were

in plans that delayed imposition of the Social Security offset.) Other plans have "excess" formulas that apply lower pension benefit rates to an employee's earnings below a specified level (either the Social Security taxable wage base—usually the career average—or a dollar amount equal to a past taxable wage base).

Benefit formulas were "integrated" with Social Security for 62 percent of all pension plan participants. Integrated plans with terminal-earnings formulas tended to adopt the offset approach, while career-earnings formulas tended to incorporate the excess approach. Dollar-amount formulas were rarely coordinated with Social Security; blue-collar employees, therefore, were less likely to have integrated benefits.²¹

Maximum benefit provisions

The Employee Retirement Income Security Act of 1974 (ERISA) and subsequent amendments place ceilings on the size of annual pensions from defined benefit plans. These restrictions largely affect only highly compensated employees. Many plans, however, have provisions that restrict benefit levels for all participants. For example, 37 percent of participants were in plans that limited the number of years of service included in benefit computations; maximums of 30 or 35 years were most common. For 6 percent of the participants, annual pensions (usually including Social Security payments) could not exceed a specified percent of average annual career or terminal earnings, or a specified dollar amount (table 76).

Finally, 5 percent of participants were in defined benefit pension plans that were offset by payments from a defined contribution plan. These defined benefit plans were intended to provide a "floor" of protection below which retirement benefits could not fall. They generally were coordinated with a profit-sharing plan, and only provided benefits when the profit-sharing benefit did not yield the guaranteed floor of protection.

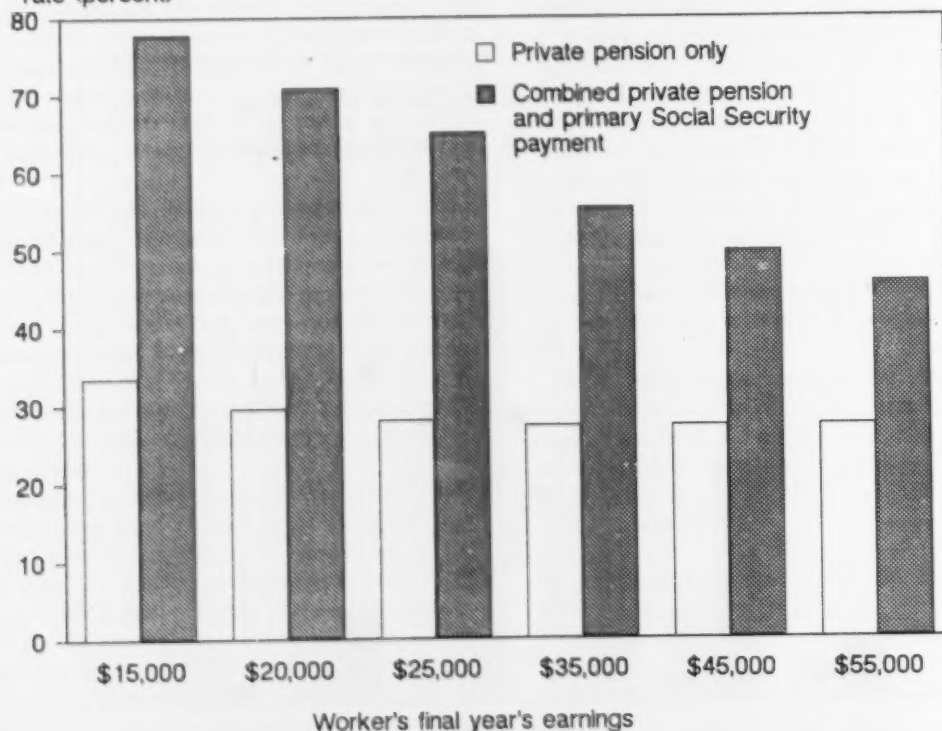
Replacement rates

A commonly used indicator of pension adequacy is the portion of a retiree's final year's earnings that is "replaced" by the retirement benefit. To calculate replacement rates for 1988 defined benefit pension plans, the maximum private benefit under each surveyed plan, not reduced for early retirement or joint-and-survivor annuity, was determined under several assumed combinations of final annual earnings and years of service. These benefit levels were then expressed as percents of earnings in the last year of employment. The calculations assume employees retired on January 1, 1988,

²¹ For a comprehensive analysis of formulas with Social Security integration characteristics, see Donald Bell and Diane Hill, "How Social Security Payments Affect Private Pensions," *Monthly Labor Review*, May 1984, pp. 15-20.

Chart 3. Replacement rates under pension plans including and excluding Social Security payments: Average benefits based on 30 years of service, medium and large firms, 1988

Average replacement rate (percent)



and final earnings are for 1987.²²

Average replacement rates resulting from defined benefit pension plans alone and in combination with primary Social Security benefits (that is, excluding benefits for spouse and other dependents) are presented in table 77.²³ For private pension formulas that are integrated with Social Security and for computation of Social Security benefits, the worker is assumed to have retired at age 65 and to have paid into Social Security for 40 years.

Chart 3 displays replacement rates based on 30 years of service for each of the earnings assumptions. Except for the lowest earnings assumption (\$15,000), the private pension plan replaced on average about 28 percent of the final year's earnings; the rate for \$15,000 was about 34 percent.

When combined with primary Social Security payments available at age 65, however, replacement rates differed

substantially as earnings increased. Employees earning \$15,000 in their final year had about three-fourths of earnings replaced after 30 years of service, while less than one-half of earnings was replaced for workers at the highest earnings level computed. The primary Social Security benefit payment was larger than the average private pension at lower earnings levels, but the pension benefit became the greater component as earnings increased.

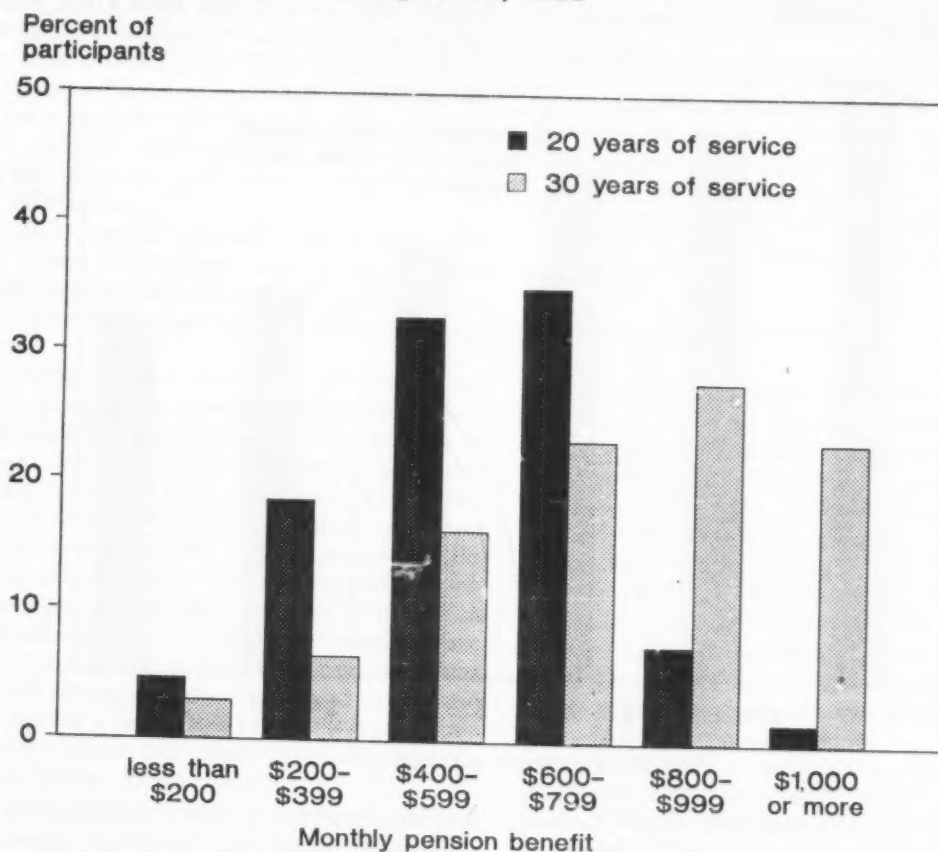
Although private pension replacement rates (excluding Social Security) for white-collar employees remained fairly constant at higher earnings levels, rates for blue-collar workers dropped by over a third. Table 69 provides an explanation: Nearly half of all production and service workers have dollar-amount formulas, paying workers with the same years of service the same benefit, regardless of earnings history. The result is a steady decrease in the replacement rate as final earnings increase. Average replacement rates for earnings-based formulas, on the other hand, increase slightly with higher final earnings.

While average replacement rates show a consistent relationship between pensions and length of service, earnings, and type of formula, the range of pensions payable is quite

²² Earnings histories, necessary for applying the pension formulas, were constructed for each final earnings level based on data provided by the Social Security Administration.

²³ The Social Security spouse benefit, which is 50 percent of the primary benefit, is paid in addition to the primary benefit while both partners are alive (unless the spouse is eligible for a larger primary benefit).

Chart 4. Monthly benefits under private defined benefit pension plans: Distribution of participants assuming earnings of \$35,000 in the final year of work, medium and large firms, 1988



broad. Chart 4 shows that calculated monthly pensions for employees retiring with 20 or 30 years' service and final earnings of \$35,000 were commonly between \$200 and \$1,000.²⁴

Normal retirement

A majority of defined benefit pension plan participants could retire before age 65 and still receive full private pensions (normal retirement benefits) (table 78). Forty-one percent of participants were required to be age 65 to receive unreduced benefits. (Among old scope participants, 31 percent had to be age 65.) Workers who were age 65 usually did not have to satisfy a length of service requirement.

When normal retirement was permitted before age 65, however, a minimum service requirement was generally imposed. For example, plans permitting normal retirement at age 62 were available to 22 percent of participants, but

nearly all such plans required participants to have worked for 10 years or more; 12 percent were in plans that permitted retirement at age 60, again with a service requirement. Participants in plans that offered normal retirement between the ages of 51 and 59 (4 percent) usually had to work 30 years or more. Plans covering 7 percent of participants permitted retirement at any age after satisfying a service requirement, usually 30 years. Retirement at any age with the required amount of service was most common in plans covering production and service workers (11 percent).

Plans that required a worker to reach a sum of age plus service in order to retire with full benefits covered 12 percent of participants. The most common age plus service requirements were 85 and 90. This type of arrangement usually specified a minimum age of 55. Minimum lengths of service were less common. (When a plan specified alternative age and service requirements for normal retirement, such as age 62 with 10 years of service or age 55 with 20 years of service, the earliest age and associated service was tabulated. This is also true for early retirement age and service requirements discussed below.)

²⁴ For a more complete discussion of replacement rates, see Donald G. Schmitt, "Today's Pension Plans: How Much Do They Pay?" *Monthly Labor Review*, December 1985, pp. 19-25.

Early retirement

Virtually all of the employees participating in defined benefit pension plans could retire before normal retirement age and receive an immediate, but reduced, pension (tables 79-80). Early retirement was almost always solely at the employee's option; only 3 percent of participants were in plans that required employer approval for early retirement benefits. The amount of an early retirement pension is reduced because benefits begin at an earlier age and the retiree is expected to receive plan payments over a longer period of time.

For 93 percent of participants in plans that allowed early retirement, the benefit was based on the normal retirement formula. Most of the remaining participants had benefits based on the normal retirement formula prorated to account for fewer years of service at early retirement. For example, employees retiring with 20 years of service at age 55, who would have 27 years of service if they worked to the plan's normal retirement age of 62, would have benefits based on 20/27 (the ratio of actual to projected service) of the normal retirement formula.

Once the basis for computing benefits is determined, the benefit derived from that formula is reduced by a percentage (factor) for each year between the actual and normal retirement ages. If a plan's normal retirement age is 62, for example, and the reduction factor is 6 percent, a person retiring at age 59 would receive 82 percent of the normal formula amount (100 percent minus 3 years times 6 percent). In addition to the 18-percent reduction for early retirement, the annuity in this example would be based on fewer years of service and possibly lower earnings than at age 62.

The reduction factor may be uniform or may vary by age or service. Reduction factors that differed for each year of early retirement, based on the employee's life expectancy at that age (actuarial reductions), were used in plans covering 16 percent of participants with early retirement opportunities. Other methods of reducing benefits approximate an actuarial reduction. For example, for 32 percent of the participants, the reduction factor differed for age brackets of several years instead of changing each year. Half the participants had uniform reduction factors, most commonly 3, 5, or 6 percent for each year of early retirement. In plans with a low uniform reduction, such as 3 percent per year, the employer is subsidizing some of the early retirement benefit by making the reduction less severe than if benefits were computed actuarially.

Nearly three-fourths of all participants were covered by plans permitting early retirement at age 55; generally, 10 years of service were required. If service requirements were satisfied, 14 percent of all participants could retire earlier than age 55. Half of these participants could retire with reduced benefits at any age, generally with a service requirement of 30 years.

The early retirement pension for 9 percent of participants was supplemented by additional monthly payments if

employees retired after meeting a specified age or length-of-service requirement higher than the minimum needed to retire. Plan sponsors include these supplementary benefits either to induce older workers to retire or as a reward for long service. Supplements generally last until Social Security benefits are payable.

For the first time, the survey looked at special incentives employers may offer, outside of formal pension plan provisions, to employees who retire within a specified time period. These early retirement incentives, often called "open windows," provide a short period, usually a few months, for employees to choose early retirement with some added advantage over regular pension plan provisions. Such programs often are used to achieve needed reductions in staff without resorting to layoffs. Firms that offered at least one early retirement incentive to eligible workers over the past 5 years covered 14 percent of defined benefit pension plan participants.

Most participants were in plans that offered just one open window in the last 5 years. The following table lists the major incentives offered and proportion of plan participants who were eligible for the incentive. (It was common for more than one incentive to be offered as part of a single open-window program.²⁵)

Percent of participants in firms offering an early retirement incentive

25—50

10—24

Incentive

Monthly supplements for a specified period or for life

No reduction in annuity due to early retirement

Additional years of age and/or service used in computing benefits

Lump-sum payment at retirement in addition to annuity

Continuation of the same health care benefits available to active employees (without benefit reductions or changes in the amount the employee must contribute).

Disability retirement

A career-ending disability may entitle an employee to a pension before retirement age. If the disability satisfies the plan's definition of total disability, pension benefits often begin immediately. When an employer provides other sources of disability income, such as long-term disability insurance, the disability retirement benefit might be deferred until the other forms of income have ceased. Ninety-two

²⁵ For more information on early retirement incentives, see "Early Retirement Incentives Offered to 24 percent of Companies in 1986," *Spencer's Research Reports*, July 1987, pp. 111.02. -1 -10.

percent of pension plan participants were covered by some type of disability retirement provision in 1988 (table 81).

Two-thirds of the production and service workers with disability retirement coverage were in plans with immediate benefits. In contrast, white-collar workers were more likely to be in plans with deferred benefits. Workers with deferred benefits were usually given long-term disability insurance (LTD) benefits that typically provided 50 or 60 percent of earnings at the time of disability; this was more than that generally provided by pension plans with immediate disability retirement. Furthermore, most deferred retirement benefits were greater than immediate pensions, primarily because the time during which LTD benefits were paid was typically added to an employee's length of service for computation of pension benefits. (See chapter 4 for details of LTD benefit plans.)²⁶

Eligibility for disability retirement benefits usually depended on length of service; generally 10 years or more were required. However, 13 percent of the participants had no age or service requirements, and 31 percent had to meet the qualifications of their LTD plans, which usually had minimal service requirements.

Postponed retirement

Employees may continue to work after normal retirement age, although in 1988 only half the pension plan participants could receive benefits that reflected these additional years of service (table 82). Moreover, only 12 percent of the participants could receive upward adjustments in benefits to reflect a shorter retirement period; this percentage has increased only slightly over the past few years. Recently enacted changes in the Age Discrimination in Employment Act, however, will require employers to credit all service after normal retirement age, subject to any maximum credited service provision of the plan. Because the effective date of this new requirement varies for different plans, 1988 data still show participants in plans that do not credit service after normal retirement age.

Postretirement pension increases

Inflation can severely erode the purchasing power of a fixed pension throughout a worker's retirement years. Plans that increased pensions for current retirees at least once during the 1983-87 period covered 29 percent of pension plan participants (tables 83-84). Most of these increases were discretionary, or ad hoc, rather than automatic adjustments specified in the pension plans. Ad hoc increases were made to beneficiaries under plans covering 26 percent of participants.

The amounts of ad hoc increases were not directly linked to a cost-of-living index. Instead, retirees' current pensions

were usually increased by either a percentage varying by the length of retirement, or a dollar amount per year of service. The latter type of increase more often affected the pensions of production and service workers.

Since the survey reports only the number of current employees covered by defined benefit pension plans and not the number of retirees, the proportion of annuitants actually receiving postretirement pension increases is not known. Thus, the measures discussed in this section describe the incidence of postretirement increases among active plan participants.

In 1988, 30 percent of the pension plan participants in old scope establishments were in plans granting at least one ad hoc increase in the preceding 5 years. This number has decreased steadily from a high of 51 percent in 1983. That level was due in part to the relatively high rate of price increases over the 1978-82 period.

The size of ad hoc pension increases during 1983-87 was computed for each plan granting such an increase, for participants retired 5 years, 10 years, and 15 years with monthly pension amounts of \$250 and \$750 in effect on December 31, 1982. Where increases varied by a retiree's length of service, 25 years of service was assumed. These increases were then averaged, by multiplying them by the proportion of active workers participating, to provide surveywide estimates for each example. As shown in the tabulation below, the length of retirement was a significant factor in determining the size of pension adjustments, with larger increases paid to persons retired longest.

Monthly pension on December 31, 1982	Years retired		
	5	10	15
\$250:			
Average pension on December 31, 1987	\$271	\$287	\$305
Percent change, December 31, 1982-87	8	15	22
\$750:			
Average pension on December 31, 1987	\$795	\$843	\$898
Percent change, December 31, 1982-87	6	12	20

The BLS Consumer Price Index for All Urban Consumers (CPI-U) rose 18 percent over the 5-year period studied.²⁷ For retirees in plans with ad hoc adjustments, and with monthly pensions and years of retirement shown above, average pension increases ranged from 6 to 22 percent over the same 5-year period.

Only 4 percent of all participants were in plans that provided for automatic increases in pension benefits to compensate for increases in the cost of living. In most instances, these cost-of-living-adjustment formulas were based on changes in the BLS Consumer Price Index.

²⁶ For a more complete discussion of disability retirement, see Donald Bell and William Wiatrowski, "Disability Benefits for Employees in Private Pension Plans," *Monthly Labor Review*, August 1982, pp. 36-40.

²⁷ The rate of increase was determined by comparing the annual average CPI-U for 1987 to the annual average CPI-U for 1982. For a discussion of postretirement increases, see Donald G. Schmitt, "Postretirement Increases Under Private Pension Plans," *Monthly Labor Review*, September 1984, pp. 3-8.

Adjustments were often restricted, however, by provisions that limited the benefit change to a portion of the CPI change, by ceilings (generally 4 percent or less) on the periodic increase that could be applied, and, occasionally, by maximum lifetime increases. Plans providing cost-of-living increases most often called for annual adjustments.

The survey also collected information on the incidence of lump-sum payments made to current retirees to compensate for inflation. In 1988, 5 percent of participants were in plans that gave retirees at least one lump-sum payment during the 1982-87 period. These payments ranged from \$100 to over \$1,200. Normally, retirees receiving these lump sums also received, during the same period, permanent increases in their regular monthly annuities.

Vesting

Even when an employee leaves an employer before becoming eligible for either a normal, early, or disability retirement benefit, a pension may ultimately be paid (tables 85-86). If certain conditions are satisfied at the time of separation, workers have a vested interest in all or a portion of their accrued pension benefits and may begin receiving benefits years later.

Although all pension participants are entitled to vested benefits under the Employee Retirement Income Security Act (ERISA), some variations exist as to when this occurs. In 1988, most defined benefit pension plans required the completion of a specified number of years of service, commonly 10 years, before benefits were guaranteed (cliff vesting). The number of participants in plans requiring 10 years of service for vesting has declined since 1986, however, from 87 percent to 77 percent. This trend should continue in the future, as plans begin to adopt shorter vesting schedules required by the Tax Reform Act of 1986.

Generally, participants accrued years of vested service regardless of age, although about one-sixth were affected by the plan sponsor's right to exclude years of service before a specified age in determining vesting eligibility. Participants not in plans with cliff vesting generally were covered by a graduated vesting provision, which increased the portion of nonforfeitable benefits as years of service increased.

Unreduced vested pension payments begin at the plan's normal retirement age, based on the benefit formula in effect when the employee left the plan. As an alternative, terminated and vested participants may receive a reduced pension prior to normal retirement age if the participant had satisfied the early retirement service requirement before leaving the plan.

For terminated and vested employees who wish to receive a pension beginning prior to normal retirement age, ERISA requires the benefit to be at least the actuarial equivalent of what would have been received starting at age 65. The actuarial equivalent benefit is a reduced amount determined by the life expectancy at the age that pension payments begin. Although under ERISA the reduction factor used in determining the pension for a terminated employee can be

more severe than for early retirement, the same factor was used in plans covering 62 percent of the participants with early retirement provisions. Where reductions differed, it was most common to provide actuarial reductions to deferred vested benefits, eliminating the subsidy employers provide to employees choosing early retirement.²⁸

Postretirement survivor benefits

ERISA also requires defined benefit pension plans to make benefits available in such a way that at least 50 percent of the retiree's payments continue to the spouse after the retiree's death (table 87). When this type of pension—called a joint-and-survivor annuity—is paid, the employee will generally receive a lower benefit during retirement to account for the likely increase in the length of time payments are made. When the retiree dies, a pension benefit will be payable for the lifetime of the surviving spouse. All defined benefit pension plan participants had joint-and-survivor annuity options available to them in 1988.²⁹

Joint-and-survivor annuities are based on an actuarial or arithmetic reduction of the employee's pension. One-fifth of the participants were in plans offering only a joint-and-survivor option that provides a surviving spouse 50 percent of the retiree's adjusted pension. Two-thirds of participants had a choice of two or more alternative percentages (frequently 50, 67, and 100 percent) to be continued to the spouse, with corresponding reductions in their annuities.

As an alternative to joint-and-survivor annuities, 6 percent of participants were in plans providing a surviving spouse with a portion of the retiree's benefit. In these plans, the spousal annuity is close to what a 50-percent joint-and-survivor annuity might provide, but there is no reduction to the employee's pension to account for survivor benefits.

Preretirement survivor benefits

All defined benefit pension plan participants also had survivor benefits available in case the employee died before retirement (table 88). Participants generally had to be vested before such benefits were available. For nearly 80 percent of the participants, a surviving spouse would receive an annuity equivalent to the amount payable if the employee had retired on the day prior to death with a joint-and-survivor form of payment in effect. Most survivor pensions of this nature were based on an early retirement benefit and, aside from the joint-and-survivor reduction, were provided at no cost to the employee. However, for 13 percent of participants (down from 24 percent in 1980), preretirement joint-and-survivor protection involved an extra cost to the employee

²⁸ For additional details on plan vesting requirements, see Avy D. Graham, "How Has Vesting Changed Since Passage of Employee Retirement Income Security Act?," *Monthly Labor Review*, August 1988, pp. 20-25.

²⁹ Survivor benefits are discussed in more detail in Donald Bell and Avy Graham, "Surviving Spouse's Benefits in Private Pension Plans," *Monthly Labor Review*, April 1984, pp. 23-31.

and was available only if elected. The cost was usually paid by the employee through a small deduction in the pension ultimately payable to either the employee or the surviving spouse.

The remaining 20 percent of pension plan participants generally had a preretirement survivor annuity calculated as a portion of the employee's accrued benefit (the benefit earned as of the date of the employee's death, without a joint-and-survivor reduction). If an active employee dies after completion of the vesting requirement, a typical survivor would receive an annuity equal to 50 percent of the employee's accrued benefit to date. Payments may be reduced by the early retirement adjustment, and begin when the employee would have reached early retirement age. If the employee lives to become eligible for early retirement, the survivor benefit in many cases switches to the equivalent of a 50-percent joint-and-survivor benefit calculated as if the employee had retired on the day of death. (Where provisions changed based on age of the employee, the earliest available preretirement survivor annuity was tabulated.)

Employee contributions

The employer paid the full cost of defined benefit pension plans for 94 percent of participants. For employees who had to pay part of the cost, contributions were generally expressed as a percent of earnings. Typically, participants in contributory plans paid one rate (usually 2 or 4 percent) on earnings above a specified level, and a lower rate (or frequently zero) below that earnings level. The annual earnings level at which this break occurred was either a flat amount stated by the plan, or the Social Security taxable wage

base (\$45,000 in 1988). Plans with varying employee contributions usually coordinated private benefits with Social Security payments; as discussed earlier, pension benefit computation rates used in these plans are often higher on earnings above the Social Security taxable wage base. Other participants in contributory plans paid a flat percent of all earnings—rarely more than 3 percent.

Participation requirements

One-third of the employees with defined benefit pension plans had immediate coverage (table 89). Approximately one-fourth could participate regardless of age but had to meet a service requirement, seldom more than 1 year. The remaining employees generally could not enter the pension plan until they reached a specified age and completed 1 year of service, the most restrictive requirement permitted under ERISA. For three-fifths of employees with age or service requirements for plan participation, service prior to formal entry into the plan was included in the computation of pension benefits.

Defined benefit pension plans were permitted under ERISA to impose a maximum age, usually 59, beyond which newly hired employees could be excluded from plan participation. In 1988, slightly less than half the participants were in plans imposing such a restriction. Restrictions on participation for older workers may no longer be imposed³⁰ although the compliance date varies from plan to plan.³⁰

³⁰ The 1986 Budget Reconciliation Act prohibits plans from excluding employees from participation due to age. Instead, a plan may require the employee to participate for 5 years before becoming eligible for benefits, even if that date is beyond the normal retirement age.

Table 69. Defined benefit pension plans:¹ Percent of full-time participants by method of determining retirement payments, medium and large firms, 1988

Basis of payment ²	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Terminal earnings formula	55	72	71	37
No alternative formula	30	37	43	18
Terminal earnings alternative	9	11	10	7
Career earnings alternative	2	4	3	1
Dollar amount alternative ³	14	20	16	10
Percent of contributions alternative	(⁴)	(⁴)	(⁴)	(⁴)
Career earnings formula	17	22	17	14
No alternative formula	11	13	12	9
Career earnings alternative	(⁴)	(⁴)	(⁴)	-
Dollar amount alternative ³	6	9	5	5
Percent of contributions alternative	(⁴)	(⁴)	(⁴)	-
Dollar amount formula ³	26	5	9	47
No alternative formula	25	5	9	45
Dollar amount alternative ³	1	-	(⁴)	2
Percent of contributions alternative	(⁴)	-	-	(⁴)
Percent of contributions formula	1	(⁴)	1	2
Cash account	1	1	1	(⁴)

¹ Excludes supplemental pension plans.

² Alternative formulas are generally designed to provide a minimum benefit for employees with short service or low earnings.

³ Includes formulas based on dollar amounts for each year of service and flat monthly benefit varying by service.

⁴ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 70. Defined benefit pension plans:¹ Percent of full-time participants in plans with percent of terminal earnings benefit formulas by type and amount of formula, medium and large firms, 1988

Type and amount of formula ²	Total	Provision for maximum benefit ³		Provision for integration with Social Security benefit		Type and amount of formula ²	Total	Provision for maximum benefit ³		Provision for integration with Social Security benefit	
		Subject to maximum	Not subject to maximum	With integrated formula	Without integrated formula			Subject to maximum	Not subject to maximum	With integrated formula	Without integrated formula
All participants						Technical and clerical					
Total	100	100	100	100	100	Total	100	100	100	100	100
Fiat percent per year of service	54	61	46	50	83	Fiat percent per year of service	52	62	40	49	90
Less than 1.00	1	(⁴)	2	(⁴)	-	Less than 1.00	1	(⁴)	1	(⁴)	-
1.00-1.24	5	2	8	(⁴)	-	1.00-1.24	2	1	4	(⁴)	-
1.25-1.49	8	5	11	6	-	1.25-1.49	7	3	14	7	-
1.50-1.74	26	32	19	27	-	1.50-1.74	25	31	17	24	-
1.75-1.99	4	4	5	5	-	1.75-1.99	3	3	2	3	-
2.00-2.24	9	16	2	10	-	2.00-2.24	12	19	2	12	-
2.25-2.49	1	1	-	1	-	2.25-2.49	1	2	-	1	-
2.75 or greater	(⁴)	1	-	1	-	2.75 or greater	1	1	-	1	-
Percent per year varies	46	39	54	50	17	Percent per year varies	48	38	60	51	10
By service	16	14	19	16	-	By service	18	16	21	19	-
By earnings	23	19	26	26	-	By earnings	22	16	28	25	-
By age	2	-	4	2	-	By age	3	-	7	3	-
By earnings and service	5	6	5	6	-	By earnings and service	4	4	4	5	-
Other ⁵	(⁴)	(⁴)	-	(⁴)	-	Other ⁵	(⁴)	(⁴)	-	(⁴)	-
Professional and administrative						Production and service					
Total	100	100	100	100	100	Total	100	100	100	100	100
Fiat percent per year of service	52	60	40	49	81	Fiat percent per year of service	58	62	55	52	81
Less than 1.00	1	(⁴)	2	(⁴)	-	Less than 1.00	1	(⁴)	2	(⁴)	-
1.00-1.24	3	1	5	(⁴)	-	1.00-1.24	9	3	15	(⁴)	-
1.25-1.49	4	3	6	4	-	1.25-1.49	12	11	13	9	-
1.50-1.74	29	34	22	29	-	1.50-1.74	23	29	17	26	-
1.75-1.99	4	4	4	4	-	1.75-1.99	6	6	7	8	-
2.00-2.24	10	15	2	10	-	2.00-2.24	7	13	1	8	-
2.25-2.49	1	1	-	1	-	2.25-2.49	(⁴)	(⁴)	-	(⁴)	-
2.75 or greater	1	1	-	1	-	2.75 or greater	(⁴)	(⁴)	-	(⁴)	-
Percent per year varies	48	40	60	51	19	Percent per year varies	42	38	45	48	19
By service	19	15	23	18	-	By service	11	10	12	9	-
By earnings	23	20	28	26	-	By earnings	22	20	23	28	-
By age	2	-	4	2	-	By age	2	-	3	2	-
By earnings and service	5	5	5	5	-	By earnings and service	7	8	6	9	-
Other ⁵	(⁴)	(⁴)	-	(⁴)	-						

¹ Excludes supplemental pension plans.

² If a plan contained more than one terminal earnings formula, a primary formula was selected and tabulated.

³ These maximum provisions are independent of Internal Revenue Code ceilings on pensions payable from defined benefit plans.

⁴ Less than 0.5 percent.

⁵ Includes formula based on a flat percentage of earnings, varying by length of service.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category, or data were insufficient to show further breakouts.

Table 71. Defined benefit pension plans:¹ Percent of full-time participants in plans with terminal earnings formulas by definition of terminal earnings, medium and large firms, 1988

Definition of terminal earnings	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Three years	13	14	10	15
Last 3	1	1	1	2
High 3	1	1	1	2
Of last 10	1	1	1	1
Of career	1	1	1	1
High consecutive 3	11	12	9	11
Of last 5	1	2	1	1
Of last 10	8	8	6	9
Of career	2	2	2	2
Other	(²)	(²)	(²)	-
Five years	82	82	86	77
Last 5	4	4	5	2
High 5	12	11	12	12
Of last 10	5	6	4	7
Of last 15	(²)	(²)	(²)	(²)
Of career	6	5	8	5
High consecutive 5	67	67	69	63
Of last 10	48	49	51	43
Of last 15	1	1	1	1
Of career	18	17	18	18
Other period ³	5	4	3	8

¹ Excludes supplemental pension plans.

² Less than 0.5 percent.

³ Formulas based on earnings during period other than 3 or 5 years' service, or period not immediately before retirement (for example, first 5 of last 10 years' service).

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 72. Defined benefit pension plans:¹ Percent of full-time participants with earnings-based benefit formulas, by definition of earnings, medium and large firms, 1988

Definition of earnings	Total ²	Terminal earnings formula	Career earnings formula	Definition of earnings	Total ²	Terminal earnings formula	Career earnings formula
All participants				Technical and clerical			
Total	100	100	100	Total	100	100	100
Basic, or straight-time, earnings only	44	44	47	Basic, or straight-time, earnings only	50	49	47
Basic, or straight-time, earnings plus other earnings	56	56	52	Basic, or straight-time, earnings plus other earnings	50	51	53
Overtime	43	46	38	Overtime	43	43	44
Shift differentials	35	33	36	Shift differentials	31	31	34
Bonuses	32	34	30	Bonuses	32	34	28
Commissions	32	30	32	Commissions	29	28	34
Definition of earnings not determinable	(³)	(³)	1	Definition of earnings not determinable	(³)	(³)	1
Professional and administrative				Production and service			
Total	100	100	100	Total	100	100	100
Basic, or straight-time, earnings only	41	42	40	Basic, or straight-time, earnings only	42	41	55
Basic, or straight-time, earnings plus other earnings	58	57	59	Basic, or straight-time, earnings plus other earnings	57	59	44
Overtime	47	49	40	Overtime	38	46	32
Shift differentials	37	34	41	Shift differentials	37	36	32
Bonuses	36	36	34	Bonuses	29	32	27
Commissions	35	32	41	Commissions	32	30	21
Definition of earnings not determinable	(³)	(³)	(³)	Definition of earnings not determinable	(³)	-	1

¹ Excludes supplemental pension plans.

² Includes plans with benefit formulas based on a dollar amount that varies by earnings.

³ Less than 0.5 percent.

NOTE: Sums of individual items may be greater than totals because more than one type of earnings may be included in this category. Dash indicates no employees in this category.

Table 73. Defined benefit pension plans:¹ Percent of full-time participants in plans with percent of career earnings benefit formulas by type and amount of formula, medium and large firms, 1988

Type and amount of formula ²	Total	Provision for maximum benefit ³		Provision for integration with Social Security benefit		Type and amount of formula ²	Total	Provision for maximum benefit ³		Provision for integration with Social Security benefit	
		Subject to maximum	Not subject to maximum	With integrated formula	Without integrated formula			Subject to maximum	Not subject to maximum	With integrated formula	Without integrated formula
All participants						Professional and administrative					
Total	100	100	100	100	100	Total	100	100	100	100	100
Flat percent per year of service	35	16	36	8	88	Flat percent per year of service	39	18	40	9	91
Less than 1.00	1	-	1	1	2	Less than 1.00	2	-	2	-	-
1.00-1.24	3	-	3	-	10	1.00-1.24	2	-	2	-	-
1.25-1.49	6	-	6	5	7	1.25-1.49	4	-	4	-	-
1.50-1.74	18	-	18	(⁴)	52	1.50-1.74	26	-	27	-	-
1.75-1.99	2	-	2	1	4	1.75-1.99	(⁴)	-	(⁴)	-	-
2.00-2.24	2	-	2	1	3	2.00-2.24	2	-	3	-	-
2.25 or greater	3	-	4	(⁴)	10	2.25 or greater	2	-	2	-	-
Percent per year varies	63	64	62	92	7	Percent per year varies	59	62	58	91	4
By service	5	-	5	4	7	By service	5	-	5	-	-
By earnings	57	-	57	86	-	By earnings	54	-	53	-	-
By age	(⁴)	-	(⁴)	(⁴)	-	By age	(⁴)	-	(⁴)	-	-
By earnings and service	(⁴)	-	-	1	-	By earnings and service	(⁴)	-	-	-	-
Other ⁵	2	-	2	-	6	Other ⁵	2	-	2	-	5

¹ Excludes supplemental pension plans.

² If a plan contained more than one career earnings formula, a primary formula was selected and tabulated. This table includes plans with career earnings formulas that serve as an alternative to a terminal earnings formula.

³ These maximum provisions are independent of Internal Revenue Code ceilings on pensions payable from defined benefit plans.

⁴ Less than 0.5 percent.

⁵ Includes formula based on a flat percentage of earnings, varying by length of service.

NOTE: Data were insufficient to show technical-clerical and production-service workers separately. Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category, or data were insufficient to show further breakouts.

Table 74. Defined benefit pension plans:¹ Percent of full-time participants in plans with dollar amount benefit formulas² by type and amount of formula, medium and large firms, 1968

Type and amount of formula ³	Total	Provision for maximum benefit ⁴		Type and amount of formula ³	Total	Provision for maximum benefit ⁴	
		Subject to maximum	Not subject to maximum			Subject to maximum	Not subject to maximum
All participants				Production and service			
Total	100	100	100	Total	100	100	100
Flat monthly amount per year of service	73	83	70	Flat monthly amount per year of service	75	84	72
Less than \$5.00	(⁵)	-	1	Less than \$5.00	(⁵)	-	1
\$5.00-\$9.99	8	9	7	\$5.00-\$9.99	9	10	8
\$10.00-\$14.99	16	18	16	\$10.00-\$14.99	18	18	17
\$15.00-\$19.99	20	15	21	\$15.00-\$19.99	21	16	23
\$20.00-\$24.99	19	16	19	\$20.00-\$24.99	16	16	16
\$25.00-\$29.99	5	14	3	\$25.00-\$29.99	5	12	3
\$30.00 or greater	5	10	4	\$30.00 or greater	6	11	4
Amount per year of service varies by service	8	9	7	Amount per year of service varies by service	7	9	7
Amount per year of service varies by earnings	19	7	22	Amount per year of service varies by earnings	18	6	22
Flat monthly benefit varies by service	(⁵)	1	-	Flat monthly benefit varies by service	(⁵)	1	-

¹ Excludes supplemental pension plans.

² Excludes plans with dollar amount formulas that serve as a minimum benefit alternative to a percent of earnings formula.

³ If a plan contained more than one dollar amount formula, a primary formula was selected and tabulated.

⁴ These maximum provisions are independent of Internal Revenue Code ceilings on pensions payable from defined benefit plans.

⁵ Less than 0.5 percent.

NOTE: Data were insufficient to show professional-administrative and technical-clerical workers separately. Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 75. Defined benefit pension plans:¹ Percent of full-time participants by provision for integration of pension with Social Security benefit, medium and large firms, 1988

Provision	Type of benefit formula ²				Provision	Type of benefit formula ²			
	Total ³	Terminal earnings	Career earnings	Dollar amount		Total ³	Terminal earnings	Career earnings	Dollar amount
All participants					Technical and clerical				
Total	100	100	100	100	Total	100	100	100	100
With integrated formula	62	91	66	1	With integrated formula	79	93	72	(⁴)
Offset by Social Security payment ⁵	39	66	10	1	Offset by Social Security payment ⁵	52	70	13	(⁴)
Based on service ⁶	35	61	5	1	Based on service ⁶	48	65	6	(⁴)
Not based on service ⁷	4	5	5	-	Not based on service ⁷	5	4	8	-
Dollar amount	(⁴)	(⁴)	(⁴)	-	Dollar amount	(⁴)	(⁴)	(⁴)	-
Percent of payment	4	5	5	-	Percent of payment	5	4	8	-
Pure excess ⁸	1	1	3	-	Pure excess ⁸	1	(⁴)	1	-
Step-rate excess ⁹	25	28	55	-	Step-rate excess ⁹	29	26	59	-
Integrated with a Social Security breakpoint	13	15	28	-	Integrated with a Social Security breakpoint	16	14	35	-
Integrated with a specific dollar breakpoint	13	13	27	-	Integrated with a specific dollar breakpoint	14	13	24	-
Without integrated formula	38	9	34	99	Without integrated formula	21	7	28	100
Professional and administrative					Production and service				
Total	100	100	100	100	Total	100	100	100	100
With integrated formula	81	94	63	1	With integrated formula	41	85	65	2
Offset by Social Security payment ⁵	53	69	12	1	Offset by Social Security payment ⁵	24	60	5	2
Based on service ⁶	46	62	5	1	Based on service ⁶	22	55	4	2
Not based on service ⁷	7	7	7	-	Not based on service ⁷	2	5	1	-
Dollar amount	(⁴)	(⁴)	(⁴)	-	Dollar amount	(⁴)	1	(⁴)	-
Percent of payment	6	7	6	-	Percent of payment	2	5	1	-
Pure excess ⁸	1	1	2	-	Pure excess ⁸	1	1	5	-
Step-rate excess ⁹	32	26	53	-	Step-rate excess ⁹	19	30	55	-
Integrated with a Social Security breakpoint	17	15	29	-	Integrated with a Social Security breakpoint	9	17	22	-
Integrated with a specific dollar breakpoint	16	14	24	-	Integrated with a specific dollar breakpoint	10	13	33	-
Without integrated formula	19	6	37	99	Without integrated formula	59	15	35	98

¹ Excludes supplemental pension plans.

² If a plan contained more than one benefit formula based on terminal earnings, career earnings, or dollar amounts, each integrated formula was tabulated. Participants were included as under nonintegrated formulas only if none of the formulas was integrated.

³ Includes plans with benefit formulas based on a percent of employee or employer contributions and cash account plans.

⁴ Less than 0.5 percent.

⁵ Benefit as calculated by formula is reduced by portion of primary Social Security payments.

⁶ Offset is equal to the product of a percent of primary Social Security payments and the participant's years of service with the employer. A maximum offset is frequently applied, for example, 50 percent.

mum offset is frequently applied, for example, 50 percent.

⁷ Benefit formula includes a reduction by a specified percent of primary Social Security payments or a specific dollar amount.

⁸ Formula does not apply to earnings subject to FICA (Social Security) taxes or below a specific dollar breakpoint.

⁹ Formula applies lower benefit rate to earnings subject to FICA (Social Security) taxes or below a specific dollar breakpoint.

NOTE: Sums of individual items may not equal totals either because of rounding or because more than one benefit formula within a plan was integrated. Dash indicates no employees in this category.

Table 76. Defined benefit pension plans:¹ Percent of full-time participants by maximum benefit provisions,² medium and large firms, 1988

Maximum benefit provision	Type of benefit formula ³				Maximum benefit provision	Type of benefit formula ³			
	Total ⁴	Terminal earnings	Career earnings	Dollar amount		Total ⁴	Terminal earnings	Career earnings	Dollar amount
All participants					Technical and clerical				
Total	100	100	100	100	Total	100	100	100	100
Subject to maximum	40	57	5	27	Subject to maximum	45	58	5	22
Limit on years of credited service ..	37	55	4	22	Limit on years of credited service ..	42	56	4	19
Less than 20	1	1	-	1	Less than 20	1	1	-	2
20	1	1	-	1	20	1	1	-	(⁵)
25	5	5	-	4	25	5	6	-	6
26-29	(⁵)	1	-	-	26-29	1	1	-	-
30	12	16	2	9	30	12	16	2	7
31-34	1	1	(⁵)	(⁵)	31-34	1	1	1	(⁵)
35	9	14	-	2	35	13	18	-	2
36-39	1	1	-	1	36-39	1	1	-	1
40	8	12	1	3	40	9	12	1	2
41-44	(⁵)	(⁵)	-	-	41-44	(⁵)	(⁵)	-	-
45	1	1	-	1	45	1	1	-	(⁵)
More than 45	(⁵)	1	-	-	More than 45	(⁵)	(⁵)	-	-
Other maximum ⁶	6	5	1	6	Other maximum ⁶	4	5	1	3
Not subject to maximum	60	43	95	73	Not subject to maximum	55	42	95	78
Professional and administrative					Production and service				
Total	100	100	100	100	Total	100	100	100	100
Subject to maximum	47	61	6	25	Subject to maximum	34	52	5	30
Limit on years of credited service ..	44	59	5	22	Limit on years of credited service ..	29	48	2	22
Less than 20	1	1	-	2	Less than 20	1	3	-	1
20	1	1	-	(⁵)	20	1	(⁵)	-	1
25	5	5	-	6	25	4	6	-	3
26-29	1	1	-	-	26-29	(⁵)	(⁵)	-	-
30	14	17	3	9	30	11	16	1	10
31-34	1	1	(⁵)	(⁵)	31-34	1	2	(⁵)	1
35	12	16	-	2	35	5	9	-	2
36-39	1	1	-	-	36-39	1	1	-	1
40	11	14	2	3	40	5	9	(⁵)	3
41-44	(⁵)	(⁵)	-	-	41-44	(⁵)	(⁵)	-	-
45	1	1	-	-	45	1	(⁵)	-	1
More than 45	(⁵)	1	-	-	More than 45	1	2	-	-
Other maximum ⁶	5	5	1	3	Other maximum ⁶	7	7	3	9
Not subject to maximum	53	39	94	75	Not subject to maximum	66	48	95	70

¹ Excludes supplemental pension plans.

² These maximum provisions are independent of Internal Revenue Code ceilings on pensions payable from defined benefit plans.

³ If a plan contained more than one benefit formula based on terminal earnings, career earnings, or dollar amounts, each formula containing a maximum benefit provision was tabulated. Participants were included as under formulas without maximum benefit provisions only if none of the formulas contained a maximum.

⁴ Includes plans with benefit formulas based on a percent of employee or employer contributions and cash balance plans.

⁵ Less than 0.5 percent.

⁶ The benefit yielded under the formula is limited to a percent of terminal or career earnings, sometimes coordinated with primary Social Security payments, or to a flat dollar amount.

NOTE: Sums of individual items may not equal totals because more than one benefit formula within a plan may have a maximum benefit provision. Also, some benefit formulas contain a limit on years of credited service and another maximum provision. Dash indicates no employees in this category.

Table 77. Defined benefit pension plans: Average replacement rates for specified final earnings and years of service,² medium and large firms, 1988

Final annual earnings	Years of service ³						
	10	15	20	25	30	35	40
Private pension only							
All participants							
\$15,000	11.9	17.5	23.1	28.5	33.5	38.1	42.2
\$20,000	10.5	15.5	20.4	25.1	29.6	33.5	37.0
\$25,000	10.0	14.7	19.3	23.8	28.0	31.7	34.9
\$35,000	9.8	14.5	19.0	23.3	27.3	30.7	33.5
\$45,000	9.8	14.5	19.1	23.4	27.3	30.5	33.1
\$55,000	9.9	14.7	19.2	23.5	27.4	30.5	33.1
Professional and administrative							
\$15,000	11.3	16.7	22.0	27.2	32.0	36.1	39.8
\$20,000	10.5	15.4	20.3	25.0	29.4	33.1	36.3
\$25,000	10.4	15.2	19.9	24.5	28.7	32.3	35.3
\$35,000	10.8	15.9	20.8	25.5	29.7	33.1	35.9
\$45,000	11.2	16.6	21.7	26.6	30.9	34.3	36.9
\$55,000	11.6	17.2	22.5	27.5	31.9	35.3	37.9
Technical and clerical							
\$15,000	10.8	16.0	21.2	26.2	30.8	35.0	38.5
\$20,000	10.2	15.1	20.0	24.7	29.0	32.9	36.1
\$25,000	10.2	15.2	19.9	24.6	28.9	32.6	35.7
\$35,000	10.7	15.9	21.0	25.9	30.2	33.9	36.8
\$45,000	11.1	16.6	21.9	26.9	31.4	35.0	37.8
\$55,000	11.4	17.1	22.5	27.7	32.2	35.8	38.6
Production and service							
\$15,000	12.8	18.8	24.7	30.5	36.0	41.0	45.7
\$20,000	10.7	15.7	20.6	25.4	30.0	34.2	38.0
\$25,000	9.7	14.2	18.6	22.9	27.0	30.8	34.2
\$35,000	8.7	12.9	16.8	20.6	24.3	27.4	30.4
\$45,000	8.3	12.2	15.9	19.5	22.9	25.8	28.4
\$55,000	8.0	11.8	15.4	18.8	22.0	24.7	27.1
Combined private pension and primary ⁴ Social Security benefit							
All participants							
\$15,000	56.1	61.8	67.3	72.7	77.8	82.3	86.5
\$20,000	51.8	56.8	61.6	66.4	70.9	74.8	78.3
\$25,000	47.1	51.8	56.4	60.9	65.1	68.7	72.0
\$35,000	37.8	42.5	47.0	51.4	55.3	58.7	61.5
\$45,000	32.2	36.9	41.4	45.8	49.7	52.9	55.5
\$55,000	28.2	33.0	37.5	41.8	45.7	48.8	51.4
Professional and administrative							
\$15,000	55.5	60.9	66.2	71.4	76.2	80.4	84.1
\$20,000	51.8	56.7	61.5	66.3	70.7	74.4	77.6
\$25,000	47.4	52.3	56.9	61.6	65.8	69.3	72.3
\$35,000	38.8	43.9	48.8	53.5	57.7	61.1	63.9
\$45,000	33.6	39.0	44.1	49.0	53.3	56.6	59.3
\$55,000	29.9	35.5	40.8	45.8	50.2	53.6	56.2
Technical and clerical							
\$15,000	55.1	60.3	65.4	70.4	75.0	79.2	82.8
\$20,000	51.5	56.4	61.3	66.0	70.3	74.1	77.3
\$25,000	47.3	52.2	57.0	61.7	66.0	69.7	72.7
\$35,000	38.7	43.9	49.0	53.9	58.2	61.9	64.8
\$45,000	33.5	38.9	44.2	49.3	53.8	57.4	60.1
\$55,000	29.7	35.4	40.8	46.0	50.5	54.1	56.9

See footnotes at end of table.

Table 77. Defined benefit pension plans:¹ Average replacement rates for specified final earnings and years of service,² medium and large firms, 1988—Continued

Final annual earnings	Years of service ³						
	10	15	20	25	30	35	40
Combined private pension and primary ⁴ Social Security benefit							
Production and service							
\$15,000	57.0	63.1	69.0	74.7	80.2	85.2	89.9
\$20,000	52.0	57.0	61.9	66.7	71.3	75.4	79.3
\$25,000	46.8	51.3	55.7	60.0	64.1	67.8	71.3
\$35,000	36.8	40.9	44.8	48.6	52.3	55.4	58.4
\$45,000	30.6	34.6	38.3	41.9	45.3	48.1	50.7
\$55,000	26.3	30.1	33.7	37.1	40.4	43.0	45.4

¹ Excludes supplemental pension plans.

² Retirement annuity as a percent of earnings in the final year of work. The maximum private pension available to an employee, not reduced for early retirement or joint-and-survivor annuity, was calculated under each pension plan using the earnings and service assumptions shown. This benefit level was then expressed as a percent of earnings in the last year of employment.

These calculations assume employees retired on January 1, 1988, and final earnings are for 1987. Earnings histories, necessary for applying the pension formulas, were constructed for each final earnings level based on data provided by the Social Security Administration.

For private pension formulas that are integrated with Social Security (see table 75) and for computation of Social Security benefits, the worker is assumed to have retired at age 65 and paid into Social Security for 40 years. Computations exclude 2 percent of participants in cash account pension plans or plans with benefits based on career contributions.

³ The years of service intervals represent total service with the employer. Time spent satisfying service requirements for plan participation was excluded from the calculation of replacement rates, unless the pension plan specified that such time was to be included in benefit computations.

⁴ Excludes benefits for spouses and other dependents.

Table 78. Defined benefit pension plans:¹ Percent of full-time participants by minimum age and associated service requirements for normal retirement,² medium and large firms, 1988

Age and service requirement ²	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants	Age and service requirement ²	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100	Age 62	22	20	19	24
No age requirement	7	3	5	11	No service requirement	3	3	3	3
Fewer than 30 years' service	(³)	-	-	(³)	1-4 years' service	(³)	(³)	(³)	1
30 years' service	7	3	5	10	5 years' service	(³)	(³)	1	(³)
More than 30 years' service	(³)	(³)	(³)	1	10 years' service	11	9	8	14
Age 51-54	(³)	-	-	(³)	11-14 years' service	(³)	(³)	(³)	(³)
30 years' service	(³)	-	-	(³)	15 or 20 years' service	2	3	3	2
Age 55	2	3	1	3	25 years' service	2	2	1	2
20 years' service	1	2	(³)	(³)	30 years' service	2	2	3	2
30 years' service	1	1	(³)	2	Age 63-64	1	1	2	1
More than 30 years' service	1	-	(³)	1	No service requirement	(³)	(³)	(³)	-
Age 56-59	1	(³)	(³)	2	10 years' service	1	1	2	1
15 or 20 years' service	(³)	-	-	(³)	20 years' service	(³)	-	-	(³)
30 years' service	(³)	-	-	(³)	Age 65	41	41	42	40
More than 30 years' service	1	(³)	(³)	1	No service requirement	33	34	36	31
Age 60	12	15	13	9	1-4 years' service	(³)	-	-	(³)
No service requirement	3	4	4	3	5 years' service	3	3	2	3
1-5 years' service	2	3	2	1	10 years' service	5	4	4	6
10 years' service	2	2	2	2	15 or more years' service	1	(³)	(³)	1
15 or 20 years' service	3	2	3	2	Sum of age plus service ⁴	12	15	16	9
25 years' service	1	1	1	(³)	Equals fewer than 80	2	2	2	1
30 years' service	1	2	1	1	Equals 80	1	1	1	1
More than 30 years' service	(³)	(³)	(³)	(³)	Equals 85	5	6	5	4
Age 61	1	1	1	1	Equals 90	4	4	8	3
20 or fewer years' service	1	(³)	(³)	1	Equals 95	(³)	(³)	(³)	(³)
26-29 years' service	(³)	1	1	(³)	Equals more than 95	(³)	(³)	(³)	-

¹ Excludes supplemental pension plans.

² Normal retirement is defined as the point at which the participant could retire and immediately receive all accrued benefits by virtue of service and earnings, without reduction due to age.

³ If a plan had alternative age and service requirements, the earliest age and associated service were tabulated; if one alternative did not specify an age, it was the requirement tabulated.

⁴ Less than 0.5 percent.

⁵ In some plans, participants must also satisfy a minimum age or service requirement.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 79. Defined benefit pension plans:¹ Percent of full-time participants by minimum age and associated service requirements for early retirement,² medium and large firms, 1988

Age and service requirement ²	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants	Age and service requirement ³	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100	Age 60	7	4	4	11
Participants in plans permitting early retirement	98	98	99	98	No service requirement	(⁴)	1	1	(⁴)
No age requirement	7	8	5	7	1-5 years' service	1	(⁴)	(⁴)	1
Fewer than 30 years' service	1	1	1	1	10 years' service	5	2	2	7
30 years' service	6	7	4	7	11-14 years' service	(⁴)	-	(⁴)	(⁴)
Less than age 55	7	4	10	8	15 years' service	1	(⁴)	1	1
No service requirement	(⁴)	(⁴)	(⁴)	(⁴)	20 years' service	(⁴)	(⁴)	(⁴)	(⁴)
Less than 20 years' service	4	3	6	4	30 years' service	(⁴)	(⁴)	-	(⁴)
20 or more years' service	3	1	4	3	More than 30 years' service	(⁴)	(⁴)	(⁴)	(⁴)
Age 55	72	77	75	68	Age 62	1	(⁴)	1	1
No service requirement	10	12	12	8	No service requirement	(⁴)	-	-	(⁴)
1-4 years' service	(⁴)	(⁴)	(⁴)	(⁴)	10 years' service	(⁴)	(⁴)	1	(⁴)
5 years' service	4	5	6	3	15 years' service	(⁴)	(⁴)	(⁴)	1
10 years' service	44	46	42	45	Sum of age plus service ⁵	4	4	4	3
11-14 years' service	(⁴)	(⁴)	(⁴)	(⁴)	Equals 70 or fewer	1	2	2	(⁴)
15 years' service	10	10	12	9	Equals 75	1	1	1	1
20 years' service	3	4	3	3	Equals 76-79	(⁴)	(⁴)	1	(⁴)
25 years' service	(⁴)	(⁴)	(⁴)	(⁴)	Equals 80	1	1	1	(⁴)
Age 56-59	(⁴)	1	(⁴)	(⁴)	Equals 81-84	(⁴)	(⁴)	(⁴)	(⁴)
15 years' service	(⁴)	(⁴)	(⁴)	-	Equals 85	1	(⁴)	(⁴)	1
30 years' service	(⁴)	(⁴)	(⁴)	(⁴)	Participants in plans without early retirement	2	2	1	2

¹ Excludes supplemental pension plans.

² Early retirement is defined as the point at which a worker could retire and immediately receive accrued benefits based on service and earnings but reduced for each year prior to normal retirement age.

³ If a plan had alternative age and service requirements, the earliest age and associated service were tabulated; if one alternative did not specify an age, it was the requirement tabulated.

⁴ Less than 0.5 percent.

⁵ In some plans, participants must also satisfy a minimum age or service requirement.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 80. Defined benefit pension plans:¹ Percent of full-time participants in plans permitting early retirement by reduction factor for immediate start of payments, medium and large firms, 1988

Reduction for each year prior to normal retirement age	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Uniform percentage ²	50	46	46	54
Less than 3.0	3	3	2	2
3.0	8	8	8	7
3.1-3.9	1	2	1	1
4.0	4	4	4	4
4.1-4.9	4	2	2	5
5.0	10	12	12	8
6.0	14	10	14	17
6.1-6.6	(³)	(³)	1	(³)
6.7	4	2	2	6
More than 6.7	2	2	1	2
Percentage varies by age	49	50	52	46
Reduction differs for each year of early retirement ⁴	16	15	16	18
Reduction differs by age bracket ⁵	32	36	36	28
Percentage varies by service	2	3	2	1

¹ Excludes supplemental pension plans.

² In specific cases, uniform percentage reductions may approximate actuarial reductions, such as early retirement at age 55 with a reduction of 6 percent a year between age 55 and the plan's normal retirement age of 62.

³ Less than 0.5 percent.

⁴ Reduction schedule is related to actuarial assumptions of the life expectancy at age that pension payments begin.

⁵ Rate of reduction is held constant within age brackets, but differs among brackets, sometimes in approximation of an actuarial table. For example, benefits may be reduced by 6 percent for each year between age 60 and the plan's normal retirement age, and by 3 percent for each year retirement precedes age 60. Also includes some plans which reduce benefits arithmetically for each year immediately below normal retirement age and actuarially below a specified age, usually 55.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 81. Defined benefit pension plans:¹ Percent of full-time participants by provisions for disability retirement, medium and large firms, 1988

Characteristic	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total with disability retirement benefits	92	92	91	93
Minimum requirements for disability retirement²				
Total	100	100	100	100
No minimum requirement	13	16	16	9
No age requirement	46	37	34	57
1 years' service	1	2	1	2
2-4 years' service	1	1	(³)	(³)
5 years' service	5	5	6	4
6-9 years' service	(³)	(³)	(³)	(³)
10 years' service	28	20	17	38
15 years' service	10	6	10	12
More than 15 years' service	1	1	1	(³)
Less than age 40	1	1	1	1
Less than 10 years' service	1	(³)	(³)	1
10 years' service	1	1	1	(³)
Age 40-49	2	2	2	2
No service requirement	(³)	(³)	(³)	(³)
Less than 10 years' service	(³)	(³)	(³)	1
10 years' service	1	1	1	1
More than 10 years' service	1	(³)	(³)	1
Age 50 or more	7	6	8	8
No service requirement	1	1	(³)	1
Less than 10 years' service	(³)	1	1	(³)
10 years' service	5	4	6	4
More than 10 years' service	2	1	1	3
Sum of age plus service	(³)	(³)	(³)	(³)
Receipt of long-term disability benefits	31	36	37	23
Benefit provisions				
Total	100	100	100	100
Immediate disability retirement ⁴	52	38	40	67
Unreduced normal formula ⁵	39	25	26	53
Reduced normal formula ⁶	8	8	7	8
Other than normal formula ⁷	6	5	7	6
Deferred disability retirement	48	62	60	33
With benefits based on:				
Service when disabled	7	8	7	5
Service plus credit to retirement date	39	51	51	26
Service with some credit	2	2	2	2

¹ Excludes supplemental pension plans.

² If a plan had alternative age and service requirements, the earliest age and associated service were tabulated; if one alternative did not specify an age, it was the requirement tabulated.

³ Less than 0.5 percent.

⁴ Immediate disability pensions may be supplemented by additional allowances until an employee reaches a specified age or becomes eligible for Social Security.

⁵ The disabled worker's pension is computed under the plan's normal benefit formula and is paid as if retirement had occurred on the plan's normal retirement date, either based on years of service actually completed or projected to a later date.

⁶ The disabled worker's pension is computed under the plan's normal benefit formula, based on years of service actually completed, and then reduced for early receipt.

⁷ The disabled worker's benefit is not computed by the plan's normal benefit formula. The methods used include flat amount benefits, dollar amount formulas, percent of unreduced normal benefits less Social Security, and percent of earnings formulas both with and without Social Security offsets.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 82. Defined benefit pension plans: Percent of full-time participants by provision for credit for service beyond normal retirement age, medium and large firms, 1988

Type of credit	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
No credit for service ¹	49	49	51	47
Pension deferred with no change in amount	40	42	42	38
Pension deferred, but increased for later retirement age	9	8	8	9
Credit for service	49	49	47	51
No additional increase for later retirement age ²	47	46	45	49
Increased actuarially	2	2	2	1
Increased by percent per additional year of service ³	1	1	1	(¹)
Not determinable	2	2	2	2

¹ Excludes supplemental pension plans.

² The Omnibus Budget Reconciliation Act of 1986 requires plan sponsors to continue benefit accruals for service beyond the plan's normal retirement age. For noncollectively bargained plans, this requirement takes effect for plan years beginning on or after January 1, 1988. However, collectively bargained plans need not comply until the earlier of (1) the expiration date of the collective bargaining agreement, or (2) the first plan year beginning on or after January 1, 1990.

³ Additional service is included in the benefit formula, but the pension is not increased for later retirement date.

⁴ Additional service is included in the benefit formula, and the pension is increased by a specified percent (not part of the benefit formula) for each year the employee remains active.

⁵ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 83. Defined benefit pension plans: Percent of full-time participants in plans granting ad hoc postretirement lump sum payments and annuity increases,¹ medium and large firms, 1988

Characteristics	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
With lump sum payment or ad hoc pension increases in the 1983-87 period	27	25	25	29
Ad hoc increases only	22	22	23	21
Lump sum payments only	1	1	(¹)	1
Ad hoc increases and lump sum payment	4	2	1	6
Without lump sum payment or ad hoc pension increases in the 1983-87 period	73	74	74	71
Not determinable	1	1	1	(¹)

¹ Excludes supplemental pension plans.

² Unscheduled increases in pension payments for employees retiring prior to 1988.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 84. Defined benefit pension plans:¹ Percent of full-time participants in plans granting ad hoc postretirement annuity increases,² medium and large firms, 1988

Characteristic	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants	Characteristic	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Percent of participants in plans with at least one postretirement increase in the 1983-87 period	26	24	25	27	Benefit formula for most recent increase				
Number of increases granted in past 5 years					Total	100	100	100	100
Total	100	100	100	100	Flat increase	56	58	64	50
One	63	67	75	55	Monthly dollar amount	7	3	2	11
Two	19	22	17	18	Less than \$10.00	2	-	-	4
Three	15	4	4	26	\$10.00	1	1	1	1
Four	(³)	1	1	-	More than \$20.00	(³)	(³)	(³)	1
Five or more	3	5	4	1	Varies by date of retirement	4	3	2	5
Provision for minimum increase in most recent adjustment					Percent of present benefit	47	54	59	37
Total	100	100	100	100	Less than 5.0	14	12	11	16
No minimum	68	84	87	91	5.0	7	7	7	6
With minimum	10	13	11	8	6.0	2	2	4	(³)
Monthly dollar amount	8	11	9	6	6.1-7.9	1	1	1	1
Less than \$5	2	2	2	2	10.0	2	5	3	(³)
\$10	3	4	3	2	15.0	(³)	(³)	(³)	(³)
\$15	1	2	2	1	More than 15.0	2	4	3	(³)
More than \$25	(³)	(³)	1	(³)	Varies by date of retirement	20	23	30	13
Varies by date of retirement	1	2	1	(³)	Type of flat increase not determinable	2	1	2	2
Percent of present benefit	2	2	2	2	Increase per year of retirement	20	23	23	16
Not determinable	2	3	2	1	Percent of present benefit	19	23	22	16
Provision for maximum increase in most recent adjustment					Less than 2.0	4	4	5	3
Total	100	100	100	100	2.0	3	2	2	3
No maximum	91	87	91	93	2.5	(³)	(³)	(³)	(³)
With maximum	7	10	6	6	3.0	3	3	2	3
Monthly dollar amount	2	2	1	2	4.0	2	6	2	(³)
\$100 or less	(³)	-	-	(³)	4.1-4.9	5	3	7	5
\$101-\$150	(³)	(³)	(³)	-	Varies by date of retirement	3	4	3	2
More than \$200	2	2	1	2	Type of increase per year of retirement not determinable	(³)	1	1	(³)
Percent of present benefit	5	8	5	4	Increase per year of service	21	13	8	32
Less than 10	(³)	1	(³)	(³)	Monthly dollar amount	21	13	8	32
10-14	3	3	3	3	\$50	3	1	1	6
25-29	(³)	(³)	(³)	(³)	\$51-\$99	9	5	4	14
30 or more	2	4	2	1	\$1.00	5	4	2	8
Not determinable	2	3	3	1	\$2.00	(³)	-	-	1
					More than \$2.00	1	1	1	1
					Varies by date of retirement	2	1	1	3
					Combination of two or more benefit formulas	2	4	3	1
					Type of formula not determinable	1	2	2	1

¹ Excludes supplemental pension plans.

² Unscheduled increases in pension payments for employees retiring prior to 1988. Excludes one-time lump-sum payments.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 85. Defined benefit pension plans:¹ Percent of full-time participants by type of vesting schedule, medium and large firms, 1988

Type of vesting schedule	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total ²	100	100	100	100
Immediate full vesting	1	(³)	1	1
Cliff vesting, ⁴ with full vesting after:				
Less than 5 years of service at any age	(³)	(³)	(³)	(³)
5 years of service at any age	5	5	5	4
6-9 years of service at any age	(³)	(³)	(³)	(³)
10 years of service at any age	62	58	52	70
10 years of service after age 18	15	15	20	13
10 years of service after age 19 or later	(³)	(³)	(³)	(³)
Other ⁵	(³)	(³)	(³)	(³)
Graduated vesting, ⁶ with full vesting after:				
10 years of service or less	9	11	13	6
11 years of service	1	1	1	(³)
12-14 years of service	(³)	(³)	1	(³)
15 years of service	5	6	5	4
Other ⁷	2	3	2	1
Vesting provision not determinable ..	(³)	(³)	(³)	(³)

¹ Excludes supplemental pension plans.

² Because plans may adopt alternative vesting schedules, sums of participants covered by individual vesting schedules may exceed 100 percent.

³ Less than 0.5 percent.

⁴ Under a cliff vesting schedule, an employee is not entitled to any benefits accrued under a pension plan until satisfying the requirement for 100-percent vesting.

⁵ Participants in this group were in plans which called for vesting in less than 10 years of service after a specified age.

⁶ Graduated vesting schedules give an employee rights to a gradually increasing share of pension benefits determined by years of service, eventually reaching 100-percent vesting status.

⁷ Participants in this group were in plans which call for 50-percent vesting after 5 years of service if age plus service equals 45. Thereafter, the vested percentage increases 10 percentage points each of the next 5 years.

Table 86. Defined benefit pension plans:¹ Percent of full-time participants with provision for early receipt of vested benefits² by comparison of reduction factors with early retirement, medium and large firms, 1988

Reduction for each year prior to normal retirement age	All participants				Professional and administrative participants				Technical and clerical participants				Production and service participants			
	Total	Reduction factor for early retirement is—		With-out provision for early retirement	Total	Reduction factor for early retirement is—		With-out provision for early retirement	Total	Reduction factor for early retirement is—		With-out provision for early retirement	Total	Reduction factor for early retirement is—		With-out provision for early retirement
		Same	Differ-ent			Same	Differ-ent			Same	Differ-ent			Same	Differ-ent	
Total	100	62	37	1	100	58	41	1	100	62	37	1	100	64	35	1
Uniform percentage ³	34	27	7	-	31	24	8	-	29	22	7	-	37	31	6	-
Less than 3.0	1	1	-	-	1	1	-	-	1	1	-	-	1	1	-	-
3.0	4	3	2	-	6	3	3	-	4	3	2	-	3	3	(⁴)	-
3.1-3.9	(⁴)	(⁴)	-	-	(⁴)	(⁴)	-	-	(⁴)	(⁴)	-	-	(⁴)	(⁴)	-	-
4.0	-2	2	(⁴)	-	2	2	(⁴)	-	2	2	(⁴)	-	2	1	(⁴)	-
4.1-4.9	2	2	(⁴)	-	2	2	(⁴)	-	2	2	(⁴)	-	3	3	(⁴)	-
5.0	6	5	1	-	6	5	1	-	6	5	1	-	6	5	1	-
5.1-5.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.0	12	9	3	-	9	7	2	-	10	8	2	-	15	12	4	-
6.1-6.6	(⁴)	(⁴)	-	-	(⁴)	(⁴)	-	-	(⁴)	(⁴)	-	-	(⁴)	(⁴)	-	-
6.7	3	3	(⁴)	-	2	2	(⁴)	-	2	2	(⁴)	-	4	4	-	-
More than 6.7	2	1	1	-	2	(⁴)	1	-	2	(⁴)	2	-	2	1	1	-
Percentage varies by age ..	65	34	30	1	68	34	33	1	70	39	30	1	62	32	29	1
Reduction differs for each year of early retirement ⁵	38	13	24	1	39	12	26	1	38	13	24	1	36	14	22	1
Reduction differs by age bracket ⁶	27	21	6	-	29	22	7	-	32	26	6	-	24	18	6	-
Percentage varies by service	1	1	-	-	1	1	-	-	1	1	-	-	(⁴)	(⁴)	-	-
Other basis ⁷	(⁴)	(⁴)	(⁴)	-	(⁴)	(⁴)	(⁴)	-	(⁴)	(⁴)	(⁴)	-	(⁴)	(⁴)	(⁴)	-

¹ Excludes supplemental pension plans.

² Receipt of benefits prior to normal retirement age for plan participants who terminated employment with vested rights to future benefits.

³ In specific cases, uniform percentage reductions may approximate actuarial reductions, such as early receipt of benefits at age 55 with a 6 percent a year reduction between age 55 and the plan's normal retirement age of 62.

⁴ Less than 0.5 percent.

⁵ Reduction schedule is related to actuarial assumptions of the life expectancy at age that pension payments begin.

⁶ Rate of reduction is held constant within age brackets, but differs

among brackets, sometimes in approximation of an actuarial table. For example, benefits may be reduced by 6.7 percent for each year between age 60 and the plan's normal retirement age, and by 3.3 percent for each year retirement preceded age 60. Also includes some plans that reduce benefits arithmetically for each year immediately below normal retirement age and actuarially below a specified age, usually 55.

⁷ Reduced benefit was not derived from normal retirement formula.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 87. Defined benefit pension plans:¹ Percent of full-time participants by provision for postretirement survivor annuity, medium and large firms, 1988

Type of annuity for surviving spouse	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Spouse's share of joint-and-survivor annuity ² only	83	93	94	92
50 percent of retiree's pension ...	21	15	17	26
51-99 percent of retiree's pension	4	4	3	4
100 percent of retiree's pension ..	(³)	(³)	(³)	(³)
Alternative percentages at retiree's option ⁴	68	74	75	61
Spouse's share of joint-and-survivor annuity plus portion of retiree's pension	1	(³)	(³)	2
Portion of retiree's accrued pension only	6	6	5	7

¹ Excludes supplemental pension plans.

² An annuity that provides income during the lifetime of both the retiree and the surviving spouse. The accrued pension will usually be actuarially reduced at retirement because of the longer length of time that payments are expected to be made. Employees and their spouses are required to waive the spouse annuity in writing if they desire a pension during the employee's lifetime only or another option offered by the plan, such as guarantee of payments for a specified period.

³ Less than 0.5 percent.

⁴ Alternate percentages were usually 50, 67, or 100 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 88. Defined benefit pension plans:¹ Percent of full-time participants by provision for preretirement survivor annuity, medium and large firms, 1988

Type of annuity for surviving spouse	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Equivalent of joint-and-survivor annuity ²	78	78	77	78
Based on early retirement ³	74	74	73	76
50 percent of employee pension	63	62	62	65
At extra employee cost ⁴ ...	12	12	10	14
51-99 percent of employee pension	4	4	3	4
At extra employee cost ⁴ ...	(⁵)	(⁵)	(⁵)	(⁵)
100 percent of employee pension	3	3	3	3
At extra employee cost ⁴ ...	(⁵)	(⁵)	(⁵)	-
Alternative percentages of pension at employee's option ⁶	5	6	4	4
At extra employee cost ⁴ ...	(⁵)	1	1	(⁵)
Based on normal retirement ⁷	3	4	5	2
Portion of accrued employee benefit	21	20	21	21
Reduced for early retirement	11	11	11	10
Unreduced for early retirement ...	9	8	9	11
Based on service projected to normal retirement date	1	2	1	1
Other annuity ⁸	1	2	1	1
Type of annuity not determinable	(⁵)	(⁵)	(⁵)	(⁵)

¹ Excludes supplemental pension plans.

² The spouse annuity is computed as if the employee had retired with a joint-and-survivor annuity. That is, the accrued pension is first reduced because of the longer length of time that payments were expected to be made to both the retiree and the surviving spouse. The spouse's share is then the specified percent of the reduced amount.

³ Survivor annuity is based upon the benefit the employee would have received if early retirement had occurred on the date of death.

⁴ Plan reduces the accrued employee pension benefit for each year survivor protection is in force.

⁵ Less than 0.5 percent.

⁶ Alternative percentages were usually 50 or 100 percent.

⁷ Survivor annuity is based on the benefit the employee would have received if eligible for normal retirement on the date of death.

⁸ Includes annuity based on a dollar amount formula or percent of earnings.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 89. Defined benefit pension plans:¹ Percent of full-time participants by age and length-of-service requirements for participation,² medium and large firms, 1988

Age and service requirement provision ³	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Plan participation available to new employees	100	100	100	100
Minimum requirement:				
With minimum age and/or service requirement	66	67	73	63
Service requirement only	28	26	26	30
Fewer than 6 months	2	1	1	2
6 months	2	1	1	3
1 year	20	20	18	21
2 years	1	1	1	(⁴)
3 years	1	1	1	1
Over 3 years	2	2	3	2
Age 20 or less	2	2	2	2
No service requirement	1	1	1	1
1-11 months of service	(⁴)	(⁴)	(⁴)	(⁴)
1 year	(⁴)	(⁴)	(⁴)	1
Over 1 year	(⁴)	-	(⁴)	(⁴)
Age 21	37	39	45	31
No service requirement	2	3	3	1
1-6 months of service	1	1	2	1
7-11 months	(⁴)	(⁴)	(⁴)	(⁴)
1 year	33	35	40	28
Over 1 year	(⁴)	(⁴)	1	(⁴)
Age 22 or greater	(⁴)	1	(⁴)	(⁴)
1-11 months of service	(⁴)	(⁴)	(⁴)	(⁴)
1 year	(⁴)	(⁴)	(⁴)	(⁴)
Without minimum age and/or service requirement	33	32	27	37
Age and service requirement not determinable	(⁴)	(⁴)	(⁴)	(⁴)
Maximum age requirement ⁵ :				
With maximum age limitation	47	53	56	39
Without maximum age limitation	52	47	44	60
Maximum requirement not determinable	(⁴)	(⁴)	(⁴)	1
Participation not available to new employees	(⁴)	(⁴)	(⁴)	(⁴)

¹ Excludes supplemental pension plans.

² Excludes administrative time lags.

³ If a plan had alternative participation requirements, one of which was service only, the service only requirement was tabulated.

⁴ Less than 0.5 percent.

⁵ Due to changes in the law, plans will no longer be able to exclude workers over a specified age. For noncollectively bargained plans, this change takes effect for plan years beginning on or after January 1, 1988. For collectively bargained plans, the change takes effect on the earlier of (1) the expiration date of the collective bargaining agreement, or (2) the first plan year beginning on or after January 1, 1990.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Chapter 7. Defined Contribution Plans

Defined contribution plans generally specify an employer contribution but not a formula for determining benefits, as in a defined benefit pension plan. Instead, individual accounts are set up for participants, and benefits are based on amounts credited to these accounts, plus investment earnings. White-collar workers are more likely to participate in defined contribution plans than blue-collar workers. For employees within the scope of the 1988 survey, 45 percent participated in one or more defined contribution plan. (Participation was 52 percent among the old scope establishments.)

Defined contribution plans may be divided into those designed to provide retirement funds and those intended for capital accumulation purposes. Retirement plans, as defined in this study, do not allow withdrawal of employer contributions until retirement age, death, disability, separation from service, age 59 1/2, or hardship. Capital accumulation plans, on the other hand, impose less stringent restrictions for withdrawal of employer contributions. Examples of these less stringent restrictions include permitting one or two withdrawals per year, or imposing a service requirement of 2 or 5 years before a withdrawal may be made.³¹

One third of all employees were covered by defined contribution retirement plans. Taken together with participants in defined benefit pension plans (which, as described in chapter 6, are always for retirement purposes), 80 percent of employees covered by the survey participated in one or more retirement plans. (Within the pre-1988 scope of the survey, 86 percent of employees participated in retirement plans.)

Participation in capital accumulation plans was not widespread. Fourteen percent of employees covered by the survey were in such plans, and for all but 2 percent, this was in addition to a retirement plan (table 90).

The incidence of all retirement and capital accumulation plans has dropped significantly since the 1986 survey. In 1986, 91 percent of employees participated in one or more retirement or capital accumulation plans. In 1988, 82 percent

of workers had one or more such plans, although the figure was 88 percent among old scope workers. In addition to the expanded survey scope, the decline may be due to the elimination of tax incentives for Payroll-based Employee Stock Ownership plans and the imposition of tax penalties on early receipt of certain benefit payments.

Defined contribution plans may also be classified by type of plan (table 91). The survey provided data on the following types: Savings and thrift plans (with 25 percent of employees participating); profit-sharing plans (18 percent); money purchase pension plans (6 percent); employee stock ownership plans (2 percent); and stock bonus plans (less than 0.5 percent).³² Plans that allowed the purchase of company stock at below market price (stock purchase plans) or that allowed the purchase of stock in the future at a designated price (stock option plans) were rare. Savings and thrift and profit-sharing plans were more common in old scope firms, while money purchase pension plans were less common. For other types of plans, the incidence was similar in both the old and current scopes.

Benefits were wholly financed by the employer for 44 percent of participants in defined contribution retirement plans. In contrast, capital accumulation plans were jointly financed for 86 percent of the participants. A large majority of capital accumulation plans were savings and thrift plans, which involve employer matching of employee contributions.

About one-third of participants in retirement and capital accumulation plans participated in more than one plan. This is a sharp drop from 1986, when over half had multiple plans. Where more than one plan was available, the combination was most often a defined benefit pension plan and a savings and thrift plan. In fact, the majority of participants in savings and thrift plans also participated in other plans. This was less likely to be true of participants in other types of defined contribution plans (table 92).

Cash or deferred arrangements

Plans with a cash or deferred arrangement covered 36

³¹ These definitions are for analytic purposes, but it should be noted that most defined contribution plans can be used to provide retirement income or accumulate financial assets. Capital accumulation plans may provide retirement income because withdrawals of the employer's contributions are voluntary, not mandatory. Similarly, defined contribution retirement plans can be used to accumulate assets because these plans nearly always permit preretirement withdrawals of the employer's contributions (for example, at age 59 1/2, upon termination of employment prior to retirement, or upon disability). Many of these plans also permit employees to receive a lump sum, rather than an annuity, upon retirement.

³² A money purchase pension plan provides for a pension annuity or other form of retirement income that is determined by fixed contribution rates plus earnings credited to the employee's account. In a stock bonus plan, the employer or the employee and the employer jointly contribute to a trust fund that invests in various securities. Employee stock ownership plans are generally wholly employer financed, and are designed to distribute company stock periodically to employees. Savings and thrift and profit-sharing plans are described later in this chapter.

percent of the employees within the scope of the survey (table 93).³³ These arrangements allow participants to choose between receiving currently taxable income or deferring taxation by placing the money in a retirement account. Cash or deferred arrangements took the form of either salary reduction plans, deferrals of profit-sharing allocations, or regular contributions to a pension plan on a pretax basis. (Among old scope employees, 42 percent of had such arrangements available.)

Salary reduction plans (available to 34 percent of employees) allow employees to contribute a part of their earnings to a retirement plan and defer income taxes on those contributions and their earnings until distribution. Such contributions are referred to as "employee elective deferrals" or "pretax contributions."

Deferrals of profit-sharing allocations (available to 2 percent of employees) provide employees with the choice of receiving an employer's profit-sharing contribution immediately or deferring the contribution and postponing taxation until distribution. For 1 percent of employees, the cash or deferred arrangement took the form of required contributions to an existing pension plan made prior to determining taxable income.

Salary reduction features were twice as likely to be available to professional and administrative employees as to production and service employees. For all workers with salary reduction features, the most common vehicle for pretax savings was a savings and thrift plan, accounting for two-thirds of participants. The remainder generally made salary reduction contributions through a profit-sharing plan or a freestanding plan, that is, a plan set up for employee salary reduction with no employer contribution.

From a different perspective, 64 percent of all participants in defined contribution plans could make voluntary salary reduction contributions to their plan. The incidence was higher for white-collar (66 percent) than for blue-collar (58 percent) employees. The following tabulation shows the percent of defined contribution plan participants in plans with salary reduction features:

Plan type	Percent of participants
Savings and thrift	85
Deferred profit sharing	40
Money purchase pension	6

Savings and thrift plans

Twenty-five percent of employees participated in savings and thrift plans—35 percent of white-collar and 15 percent

of blue-collar workers. Under these plans, employees contribute a predetermined portion of earnings to an account, all or part of which is matched by the employer. Contributions are invested in various ways, such as stocks, bonds, and money market funds, as directed by the employee or employer, depending upon the provisions of the plan. Although usually designed as a long-term savings program, savings and thrift plans allow for withdrawals subject to specified conditions and, possibly, penalties.

Employee contributions (tables 94-96). Savings and thrift plans allow employees to choose from a range of possible contribution rates. A typical plan might allow employees to contribute (in whole percentages) anywhere from 2 to 16 percent of pay. One-fourth of participants could contribute up to 16 percent of their earnings; 10, 12, and 15 percent were other common maximums.

Salary reduction, since first studied in 1985, has become a dominant provision of savings and thrift plans. Eighty-five percent of participants in savings and thrift plans were allowed to make pretax contributions, up from 75 percent in 1986 and 65 percent in 1985. The provisions governing pretax contributions vary widely. For example, 65 percent of the participants in plans allowing pretax contributions had to make at least some of their contributions on a pretax basis, while the other 35 percent had an option. Even those with no initial option could, in many cases, choose between pretax and posttax contributions after making their initial pretax contributions. The tax status of employee contributions is important because of the current deferral of income taxes and because pretax contributions may not be withdrawn from an employee's account, except in limited circumstances, without severe tax penalties.

Employer matching contributions (table 97). Employers provide an incentive for participation in a savings and thrift plan by matching all or a portion of the employee's contribution and adding this amount to the employee's account. Usually the employer matches a portion of the employee's contribution up to a specified percent of the employee's earnings. For example, the most common provision found in 1988 was for an employer to match 50 percent of the employee's contribution up to the first 6 percent of earnings. Assuming the employee contributed 8 percent of earnings, the employer would add 3 percent (50 percent of the first 6 percent of the employee's earnings). In contrast with these straight percentage matches, nearly one-fourth of the participants received matching contribution rates varying by length of service, level of employee contribution, or company profits.

Investment decisions (table 98). Nine out of ten participants in savings and thrift plans were allowed to choose how they wanted their own contributions invested. Common investment vehicles offered by these plans included company stock, common stock funds, guaranteed investment contracts,

³³ The survey determined the number of employees actually contributing to freestanding, i.e., no employer contribution, salary reduction plans. It also determined the number participating in employer-financed plans allowing employee contributions with pretax dollars. Due to difficulties in obtaining data, the actual number of employees choosing to make pretax contributions is not available.

Government securities, corporate bonds, and money market funds. The number of choices in these plans varied from two to five or more, with three choices being the most common. Employees were nearly always allowed to split their contributions among the various options and were allowed to change their investment choices periodically.

Employees generally had less flexibility when it came to employer contributions. Just under half of the participants were permitted to choose how the matching contribution was to be invested. Where no choice was permitted, the plan typically specified that the matching contribution was to be invested in company stock.

Withdrawals and loans (table 99). Prior to normal payout at retirement, disability, or termination of employment, 72 percent of the participants in savings and thrift plans were allowed to withdraw all or a portion of employer contributions. However, 30 percent were only allowed to withdraw employer contributions for hardship reasons, such as medical or educational expenses. The remaining participants could withdraw employer contributions for any reason.

In addition to the distinction between hardship withdrawals and withdrawals for any reason, other restrictions were often placed on withdrawals of employer contributions. For example, 7 percent of participants who could make withdrawals could only withdraw part of their employer's contribution. In addition, 45 percent of participants who could make withdrawals had a penalty imposed if they did so. Most commonly, penalties involved suspending employee contributions, and employer matching contributions, for a given period, such as 6 months or 1 year. Other penalties included suspending employer matching contributions only, or forfeiting nonvested employer contributions.

Another method of accessing an employee's account prior to final payout is through loan provisions—30 percent of participants in savings and thrift plans were allowed to borrow from their accounts. Interest rates on employee loans were typically determined by a specific economic indicator (such as the prime rate or U.S. Treasury bill rate) or were at the discretion of the plan sponsor (employer, employer association, or union). Interest rates also commonly varied by the purpose of the loan. Loans were generally required to be repaid within 5 years, but longer payment periods applied for home purchase or renovation loans.

Distribution (table 100). At retirement, savings and thrift plans virtually always allowed for payout in the form of a lump sum. Many participants were given a choice from among a lump sum and other options, such as a lifetime annuity or installments over a specified period.

Profit-sharing plans

Profit-sharing plans were available to 18 percent of all employees in 1988 (table 101). There are three types of profit-sharing plans—cash plans (covering 1 percent of the

workers), deferred plans (14 percent), and plans that offer a combination of cash and deferred benefits (3 percent). In a cash plan, benefits are paid directly to the participants in cash, usually at the end of the year, while a deferred plan holds money in employee accounts until retirement or another condition stipulated by the plan (for example, disability or death). In a combined plan, the employee may automatically receive a portion of the profits in cash, with the remainder placed in a deferred account, or the employee may be given a choice of cash or deferred benefits.

Just over half of the participants in deferred profit-sharing plans had employer contributions determined by a specified formula, such as 4 percent of profits if annual sales were \$2-5 million and 8 percent if sales exceeded \$5 million. The remaining participants were in plans where the employer contribution was determined at the discretion of the employer.

Once the employer contribution is determined, it may be allocated to individual participants in a number of ways. The most common method of allocation was in proportion to salary (74 percent of plan participants). Other allocation methods included formulas based on earnings and service, and equal allocations to all participants. Another plan feature, loans from employee accounts, was available to one-third of the participants in deferred profit-sharing plans.

Participation and vesting

Minimum age and/or service participation requirements are more common in defined contribution plans than in defined benefit plans (tables 102-103). To begin accumulating benefits, 86 percent of savings and thrift plan participants and 91 percent of deferred profit-sharing plan participants had to meet such requirements. In contrast, only 66 percent of defined benefit plan participants faced such provisions.

Of those defined contribution plans with participation requirements, most required a minimum amount of service, commonly 1 year, but did not require an employee to be a designated minimum age. Conversely, defined benefit pension plans that included participation requirements most often specified a minimum age and a minimum amount of service.

Defined contribution plans are subject to ERISA vesting rules in the same manner as defined benefit pension plans. Vesting schedules vary significantly, however, between defined benefit and defined contribution plans, and variations are also common between individual types of defined contribution plans. All vesting schedules apply to employer contributions; employee contributions (including pretax contributions) are always 100-percent vested.

Twenty-seven percent of savings and thrift plan participants and 22 percent of deferred profit-sharing plan participants had immediate full vesting, a feature rarely found in defined benefit plans. Graduated vesting, where an employee's nonforfeitable percentage increases over time and reaches 100 percent, usually after 5 or 10 years, was most common in deferred profit-sharing plans, with 75 percent of participants covered by such a provision. Among savings and thrift

plans, 33 percent of participants had graduated vesting, and only about 10 percent of defined benefit plan participants had such vesting.

Class-year vesting, where employer contributions for a particular year (class) become nonforfeitable after a specific period of time, was available to 22 percent of savings and thrift plan participants. Such vesting was uncommon in profit-sharing plans. Finally, cliff vesting, where no vesting occurs

until an employee satisfies the service requirements for 100-percent vesting, was found in the majority of defined benefit plans, but was required of only 19 percent of savings and thrift plan participants and 2 percent of deferred profit-sharing plan participants.³⁴

³⁴ See footnote 28, chapter 6.

Table 90. Retirement and capital accumulation plan coverage: Percent of full-time employees by participation in retirement plans and capital accumulation plans, medium and large firms, 1988

Type of plan	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Covered by retirement or capital accumulation plan	82	88	86	77
Retirement ¹ only	68	69	69	67
Capital accumulation ² only	2	2	2	2
Retirement and capital accumulation	12	17	15	9
Not covered by retirement or capital accumulation plan	18	12	14	23

¹ Includes defined benefit pension plans and defined contribution plans such as money purchase pension, profit sharing, and savings and thrift plans in which employer contributions must remain in the participant's account until retirement age, death, disability, separation from service, age 59 1/2, or hardship.

² Includes plans in which employer contributions may be withdrawn from participant's account prior to retirement age, death, disability, separation from service, age 59 1/2, or hardship. Excludes pure cash profit sharing, stock option, and stock purchase plans.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 91. Defined contribution and stock plans: Percent of full-time employees participating by type of plan, medium and large firms, 1988

Type of plan	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Savings and thrift ¹	25	37	32	15
Profit sharing	18	20	21	15
Immediate cash only	1	1	1	1
Deferred benefits only	14	16	16	13
Combination	3	3	4	2
Employee stock ownership	2	3	3	1
Money purchase pension	6	8	7	3
Stock bonus	(²)	1	(²)	(²)

¹ Includes 0.4 percent of employees in plans with both matching and nonmatching employer contributions. Not all participants in such plans may elect or be required to contribute.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 92. Retirement and capital accumulation plans:
Percent of full-time participants by combinations of plans,
medium and large firms, 1988

Type of plan	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Defined benefit pension	76	73	75	79
With:				
No other plan	45	32	36	58
Profit sharing ¹	7	7	8	7
Savings and thrift	21	29	26	13
Stock ²	(³)	1	1	(³)
Profit sharing ¹ and savings	2	3	2	1
Profit sharing ¹ and stock ²	(³)	(³)	(³)	(³)
Savings and stock ²	1	1	1	(³)
Money purchase pension	1	1	1	(³)
Other combinations	(³)	(³)	(³)	(³)
Profit sharing ¹	12	12	13	12
With:				
No other plan	10	9	10	10
Savings and thrift	1	2	2	1
Stock ²	1	(³)	1	(³)
Money purchase pension	(³)	(³)	(³)	(³)
Other combinations	(³)	(³)	(³)	(³)
Money purchase pension	5	8	6	4
With:				
No other plan	5	6	5	3
Savings and thrift	1	1	1	(³)
Stock ²	(³)	(³)	(³)	(³)
Savings and stock ²	(³)	(³)	(³)	(³)
Savings and thrift	5	6	6	5
With:				
No other plan	5	6	5	5
Stock ²	(³)	(³)	(³)	(³)
Stock ² plan	1	1	1	1
With:				
No other plan	1	1	1	1

¹ Excludes pure cash profit sharing plans.

² Employee stock ownership plans (ESOPs) and stock bonus plans.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.
Dash indicates no employees in this category.

Table 93. Cash or deferred arrangements:¹ Percent of full-time employees participating in plans permitting employee contributions with pretax dollars, medium and large firms, 1988

Item	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Percent of all employees in plans with cash or deferred arrangement ²	36	51	43	24
Salary reduction plans ³	34	48	39	23
Savings and thrift plans	22	33	27	12
Profit sharing plans	7	8	7	6
Supplemental contributions to money purchase pension plans	(⁴)	(⁴)	(⁴)	(⁴)
Freestanding accounts ⁵	6	8	6	4
Other ⁶	(⁴)	(⁴)	(⁴)	(⁴)
Regular contributions to pension plans on a pretax basis	1	2	1	(⁴)
Defined benefit plans ⁷	(⁴)	(⁴)	(⁴)	(⁴)
Money purchase plans ⁸	1	2	1	(⁴)
Deferral of profit sharing allocation ⁹	2	2	3	2

¹ Tabulations show percent of employees participating in plans that allow income, and associated tax, to be deferred. Not all participants may elect to have their income deferred. Includes employee contributions to retirement plans under several sections of the Internal Revenue Code (IRC). Excludes pretax contributions for insurance, dependent care, and other expenses under IRC section 125.

² The total may be less than the sum of individual items because some employees participate in more than one type of cash or deferred plan.

³ Employee may elect to make pretax contributions to a long-term savings or retirement account.

⁴ Less than 0.5 percent.

⁵ Employer contributions are not made to the plan.

⁶ Employee may allocate funds in a flexible benefits plan to a retirement account.

⁷ Required employee contributions to a defined benefit pension plan are made on a pretax basis, but an account separate from the pension plan is not established for these savings.

⁸ Employee may elect to make optional contributions to an existing plan on a pretax basis.

⁹ Employer profit sharing distribution may be taken in cash by the employee, triggering current year tax liability, or may be deferred into a long term account, with corresponding deferral of taxes.

NOTE: Sums of individual items may not equal totals either because of rounding or because some employees participate in more than one type of plan.

Table 94. Savings and thrift plans: Percent of full-time participants by maximum allowable employee contribution,¹ medium and large firms, 1988

Maximum allowable contribution ²	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Percent of employee earnings	95	97	97	92
5 percent or less	1	2	1	1
6 percent	4	4	5	3
7.01-7.99 percent	(³)	(³)	(³)	1
8 percent	4	7	3	1
9 percent	(³)	(³)	1	(³)
10 percent	13	12	12	16
11 percent	(³)	1	(³)	(³)
11.01-11.99 percent	1	1	(³)	1
12 percent	11	10	12	12
12.01-12.99 percent	(³)	(³)	(³)	(³)
13 percent	3	4	3	2
14 percent	4	4	4	3
15 percent	14	15	17	8
16 percent	24	21	25	27
16.01-16.99 percent	(³)	(³)	(³)	(³)
17 percent	5	5	4	5
17.01-17.99 percent	(³)	(³)	(³)	(³)
18 percent	2	3	2	1
18.01-19.99 percent	2	1	1	4
20 percent	4	5	4	3
20.01-24.99 percent	2	2	1	3
25 percent	(³)	1	1	-
Greater than 25 percent	(³)	(³)	(³)	1
Specified dollar amount	2	(³)	1	6
Individual retirement account limit	1	1	1	1
Other ⁴	2	2	2	2

¹ Includes contributions that may not be matched by the employer.

² If maximum varied by participant's length of service, age, or both, the highest possible percentage was tabulated.

³ Less than 0.5 percent.

⁴ Includes participants in plans where the employee's contribution was a fixed percent of earnings up to a specified dollar level and a higher percentage above that level.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 95. Savings and thrift plans: Percent of full-time participants by provision for pretax employee contributions, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Pretax contribution allowed	85	89	84	81
Pretax contribution not allowed	15	11	16	19

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 96. Savings and thrift plans: Percent of full-time participants in plans that allow pretax employee contributions by method of determining contribution, medium and large firms, 1988

Item ¹	Total	All contributions must be pretax	Initial contributions must be pretax; additional contributions must be posttax	Initial contributions must be pretax; additional contributions may be either pretax or posttax, at the employee's option	Initial contributions may be either pretax or posttax at the employee's option
All participants					
Total	100	45	12	8	35
Maximum contributions allowed:					(²)
Less than 5 percent	3	1	2	-	1
5 percent	2	1	(²)	(²)	7
6 percent	13	3	2	(²)	2
7 percent	2	-	(²)	(²)	3
8 percent	8	3	1	1	(²)
9 percent	1	(²)	3	-	5
10 percent	18	8	-	(²)	1
11 percent	1	(²)	1	(²)	2
12 percent	10	6	-	(²)	(²)
13 percent	2	1	(²)	(²)	2
14 percent	4	2	(²)	1	4
15 percent	13	7	(²)	1	7
16 percent	14	6	(²)	-	1
Greater than 16 percent	6	5	-	-	-
Specified dollar amount	1	1	-	-	-
Individual retirement account limit	2	1	-	1	-
Professional and administrative					
Total	100	45	11	9	35
Maximum contributions allowed:					(²)
Less than 5 percent	3	1	2	-	1
5 percent	2	(²)	(²)	(²)	4
6 percent	9	3	1	(²)	1
7 percent	2	-	(²)	1	4
8 percent	10	5	1	-	(²)
9 percent	2	(²)	3	1	5
10 percent	17	8	-	(²)	1
11 percent	2	(²)	-	1	1
12 percent	11	7	2	1	(²)
13 percent	3	1	-	(²)	2
14 percent	5	2	(²)	1	6
15 percent	15	7	(²)	2	7
16 percent	14	5	(²)	-	1
Greater than 16 percent	4	3	(²)	-	-
Specified dollar amount	(²)	(²)	-	-	-
Individual retirement account limit	2	1	-	1	-
Technical and clerical					
Total	100	48	12	9	31
Maximum contributions allowed:					(²)
Less than 5 percent	4	(²)	3	-	1
5 percent	2	1	(²)	-	9
6 percent	15	4	2	(²)	1
7 percent	1	-	(²)	(²)	2
8 percent	6	3	1	1	1
9 percent	2	1	1	-	6
10 percent	18	9	3	(²)	(²)
11 percent	1	(²)	-	3	1
12 percent	12	6	2	(²)	(²)
13 percent	2	2	-	(²)	1
14 percent	3	2	-	2	4
15 percent	14	8	(²)	(²)	4
16 percent	12	7	1	-	1
Greater than 16 percent	5	4	(²)	-	-
Specified dollar amount	1	1	-	-	-
Individual retirement account limit	2	1	-	1	-

See footnotes at end of table.

Table 96. Savings and thrift plans: Percent of full-time participants in plans that allow pretax employee contributions by method of determining contribution, medium and large firms, 1988—Continued

Item ¹	Total	All contributions must be pretax	Initial contributions must be pretax; additional contributions must be posttax	Initial contributions must be pretax; additional contributions may be either pretax or posttax, at the employee's option	Initial contributions may be either pretax or posttax at the employee's option
Production and service					
Total	100	44	12	5	39
Maximum contributions allowed:					
Less than 5 percent	1	(²)	(²)	-	(²)
5 percent	1	1	(²)	-	(²)
6 percent	18	2	5	1	10
7 percent	3	-	-	(²)	3
8 percent	7	2	2	1	2
9 percent	(²)	(²)	(²)	-	(²)
10 percent	16	7	4	2	5
11 percent	1	(²)	-	(²)	1
12 percent	8	5	-	(²)	3
13 percent	1	1	-	(²)	1
14 percent	4	2	-	(²)	2
15 percent	8	5	(²)	(²)	2
16 percent	15	7	-	(²)	8
Greater than 16 percent	10	9	(²)	-	1
Specified dollar amount	2	2	-	-	-
Individual retirement account limit	2	1	-	1	-

¹ If maximum contributions varied by participant's length-of-service, age, or both, the highest possible percentage was tabulated.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 97. Savings and thrift plans: Percent of full-time participants by provision for employer matching contributions, medium and large firms, 1988

Medium and large firms, 1966		Matching percentage ²							
Employee earnings to be matched ¹	Total	25 percent	50 percent	75 percent	100 percent	Other fixed percentages	Varies with contribution	Varies with profits	Other ³
All participants									
Total	100	9	40	5	10	12	7	12	5
Up to the first:									
2 percent	2	-	2	-	(¹)	-	-	1	(¹)
3 percent	7	(¹)	1	-	4	-	1	2	1
4 percent	12	3	4	-	1	4	1	2	1
5 percent	14	1	3	1	1	3	3	6	2
6 percent	47	3	24	1	4	1	-	-	-
7 percent	3	-	1	1	-	(¹)	(¹)	1	(¹)
8 percent	5	(¹)	1	2	(¹)	(¹)	(¹)	-	(¹)
9 percent	(¹)	-	-	(¹)	-	2	-	(¹)	(¹)
10 percent	3	(¹)	1	-	-	-	-	(¹)	-
12 percent	(¹)	-	-	-	-	-	(¹)	-	(¹)
Greater than 12 percent	1	1	(¹)	-	-	-	(¹)	-	(¹)
Specified dollar amount	5	(¹)	4	-	(¹)	1	-	-	(¹)
Professional and administrative									
Total	100	9	33	7	11	16	7	12	5
Up to the first:									
2 percent	1	-	1	-	(¹)	-	-	(¹)	(¹)
3 percent	6	(¹)	1	-	4	-	-	2	1
4 percent	13	4	4	-	1	1	2	2	1
5 percent	15	(¹)	3	1	2	5	2	7	2
6 percent	46	3	21	1	4	5	3	-	-
7 percent	3	-	1	1	-	1	-	(¹)	(¹)
8 percent	7	(¹)	2	3	(¹)	(¹)	(¹)	(¹)	(¹)
9 percent	1	-	-	1	-	-	-	1	-
10 percent	4	(¹)	(¹)	-	-	3	-	(¹)	(¹)
12 percent	(¹)	-	(¹)	-	-	-	(¹)	-	(¹)
Greater than 12 percent	1	(¹)	(¹)	-	-	-	-	-	(¹)
Specified dollar amount	2	(¹)	(¹)	-	(¹)	1	-	-	(¹)
Technical and clerical									
Total	100	7	40	5	12	9	9	13	5
Up to the first:									
2 percent	2	-	1	-	(¹)	-	-	1	(¹)
3 percent	8	(¹)	1	-	5	-	-	2	1
4 percent	13	3	4	-	1	1	2	2	1
5 percent	15	1	2	1	2	3	2	7	1
6 percent	48	3	27	1	3	1	5	-	-
7 percent	2	-	(¹)	1	-	1	-	(¹)	(¹)
8 percent	3	(¹)	(¹)	1	(¹)	(¹)	(¹)	(¹)	(¹)
9 percent	(¹)	-	-	(¹)	-	-	-	1	(¹)
10 percent	3	(¹)	(¹)	-	-	2	-	(¹)	(¹)
12 percent	(¹)	-	-	-	-	-	(¹)	-	(¹)
Greater than 12 percent	1	(¹)	(¹)	-	-	-	-	-	(¹)
Specified dollar amount	5	(¹)	3	-	(¹)	(¹)	-	-	(¹)

See footnotes at end of table.

Table 97. Savings and thrift plans: Percent of full-time participants by provision for employer matching contributions, medium and large firms, 1988—Continued

Employee earnings to be matched ¹	Total	Matching percentage ²							
		25 percent	50 percent	75 percent	100 percent	Other fixed percentages	Varies with contribution	Varies with profits	Other ³
Production and service									
Total	100	11	51	1	7	8	3	11	7
Up to the first:									
2 percent	4	-	3	-	(⁴)	-	-	-	(⁴)
3 percent	6	(⁴)	1	-	2	-	-	2	(⁴)
4 percent	10	2	4	-	(⁴)	2	(⁴)	1	(⁴)
5 percent	10	1	3	(⁴)	(⁴)	3	1	1	2
6 percent	48	5	26	1	4	1	2	5	4
7 percent	3	-	2	(⁴)	-	1	-	-	-
8 percent	4	1	(⁴)	(⁴)	-	(⁴)	1	2	(⁴)
9 percent	(⁴)	-	-	(⁴)	-	-	-	-	-
10 percent	3	(⁴)	2	-	-	-	-	-	(⁴)
Greater than 12 percent	3	1	1	-	-	-	-	-	(⁴)
Specified dollar amount	10	(⁴)	9	-	(⁴)	1	-	-	(⁴)

¹ Employee may contribute a percent of salary up to a specified maximum; ceilings on contributions to be matched by employers generally are lower. If the maximum varied by participant's length-of-service, age, or both, the highest possible percentage was tabulated.

² The percentage of matchable employee contributions added by employers. Some plans specified a maximum annual employer contribution.

³ Includes percentages that vary by type of investment chosen and by length of service.

⁴ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 98. Savings and thrift plans: Percent of full-time participants by provisions for investment of employer and employee contributions, medium and large firms, 1988

Characteristic	All participants		Professional and administrative participants		Technical and clerical participants		Production and service participants	
	Employer contributions	Employee contributions	Employer contributions	Employee contributions	Employer contributions	Employee contributions	Employer contributions	Employee contributions
Total in plans permitting investment choices by employees ¹	48	91	52	92	46	92	45	89
Investment choice								
Total	100	100	100	100	100	100	100	100
Company stock	49	56	53	58	44	57	48	53
Common stock fund	86	82	86	85	88	81 ²	86	79
Corporate bonds	35	32	33	33	39	31	35	33
Diversified mix of stocks and bonds	26	25	27	28	30	28	20	17
Government securities	33	32	34	35	33	30	31	28
Guaranteed investment contracts	67	70	68	69	64	71	69	70
Money market funds	28	27	31	32	30	24	21	22
Other ²	13	11	13	13	12	10	15	10
Investment choices not determinable		(⁴)	1	1	1	1	(⁴)	(⁴)
Number of choices								
Total	100	100	100	100	100	100	100	100
Two	22	24	18	18	22	24	31	32
Three	38	38	40	37	40	39	35	40
Four	24	23	28	28	22	23	21	16
Five or more	14	14	14	17	16	13	13	12
Investment choices not determinable	1	(⁴)	1	1	1	1	(⁴)	(⁴)

¹ Excludes plans that limit investment options to participants age 55 or greater.

² Includes purchases of life insurance or annuities, real estate, mortgages, and deposits in credit union or savings accounts.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 99. Saving and thrift plans: Percent of full-time participants by provisions for withdrawal of employer contributions prior to disability, retirement age, or termination of employment, medium and large firms, 1988

Least restrictive provision	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Withdrawals permitted	72	72	72	71
For hardship reasons ¹	30	32	31	27
Full withdrawal, no penalty	19	21	19	17
Full withdrawal, with penalty ..	7	8	7	5
Partial withdrawal, no penalty ..	3	2	3	3
Partial withdrawal, with penalty	(²)	(²)	(²)	(²)
Not determinable	1	1	1	2
For any reason	41	40	41	43
Full withdrawal, no penalty	14	15	13	13
Full withdrawal, with penalty ..	24	22	26	25
Partial withdrawal, no penalty ..	(²)	1	(²)	(²)
Partial withdrawal, with penalty	1	1	1	3
Not determinable	1	1	1	2
No withdrawals permitted	28	28	28	29

¹ Commonly expressed reasons for withdrawal were: Purchase or repair of primary residence, education of an immediate family member, death or illness in the family, or sudden uninsured loss.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 100. Savings and thrift plans: Percent of full-time participants by method of distribution of account at retirement, medium and large firms, 1988

Method of distribution available	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Cash distribution ¹	97	97	97	97
Lifetime annuity (including joint-and-survivor forms)	25	26	25	26
Installments	49	47	48	52
Lump sum	95	95	95	95
Stock distribution ²	1	1	1	(³)
Not determinable	2	2	3	2

¹ The total is less than the sum of the individual items because many participants are offered optional forms of cash distribution.

² Employer and employee contributions are invested solely in company stock, which is automatically distributed upon retirement or termination of employment. Stock may also be distributed under plans providing for cash distributions.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 101. Deferred profit sharing plans: Percent of full-time participants by selected provisions, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Method of determining employer contributions				
Based on stated formula	55	54	54	57
Percent of employee earnings	1	1	1	1
Fixed percent of profits	16	16	20	13
Sliding percentage based on profits, sales, or return on assets	10	11	11	10
Determined by unit profits	2	2	2	2
Other stated formula	26	24	20	31
No predetermined formula	45	46	46	43
Allocation of profits to individual employees				
Equally to all participants	1	1	(¹)	2
Based on earnings	74	74	71	76
Based on earnings and service	12	13	16	10
Other ²	13	12	12	13
Loans from employees' accounts				
Permitted	32	31	27	37
Not permitted	68	69	73	63

¹ Less than 0.5 percent.

² Includes participants in plans that based allocation on unit performance or on the ratio of employee contributions to total contributions.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 102. Savings and thrift and deferred profit sharing plans: Percent of full-time participants by age and length-of-service requirements for participation, medium and large firms, 1988

Age and service requirement provision ¹	All participants		Professional and administrative participants		Technical and clerical participants		Production and service participants	
	Savings and thrift plans	Deferred profit sharing plans	Savings and thrift plans	Deferred profit sharing plans	Savings and thrift plans	Deferred profit sharing plans	Savings and thrift plans	Deferred profit sharing plans
Total	100	100	100	100	100	100	100	100
With minimum age and/or service requirement	86	91	85	89	87	89	86	93
Service requirement only	64	66	65	67	62	64	63	66
3 months or fewer	4	9	4	8	3	9	5	9
4-5 months	(²)	-	(²)	7	(²)	6	(²)	6
6 months	6	6	8	-	(²)	-	-	-
7-11 months	(²)	-	(²)	-	40	39	44	49
1 year	43	44	44	43	1	-	1	-
13-23 months	1	-	1	1	9	2	8	(²)
2 years	7	1	5	8	3	9	1	1
3 years	2	5	3	-	-	-	-	-
Age 20 or less	6	4	5	3	7	3	6	5
No service requirement	1	1	1	1	1	(²)	1	1
1-11 months of service	3	2	2	1	3	1	3	4
1 year	2	1	2	1	3	1	2	(²)
Age 21	16	21	15	20	16	21	17	23
No service requirement	1	(²)	2	(²)	1	(²)	(²)	(²)
1-6 months of service	1	2	1	2	1	1	-	-
7-11 months	1	-	1	-	1	-	-	-
1 year	13	19	11	18	14	20	16	19
Over 1 year	1	(²)	1	(²)	1	(²)	(²)	(²)
Without minimum age and/or service requirement	14	9	15	11	12	11	14	7
Age and service requirement not determinable	(²)	-	1	-	1	-	(²)	-

¹ If a plan had alternate participation requirements, one of which was service only, the service only requirement was tabulated.
² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 103. Savings and thrift and deferred profit sharing plans: Percent of full-time participants by type of vesting schedule, medium and large firms, 1988

Type of vesting schedule	All participants		Professional and administrative participants		Technical and clerical participants		Production and service participants	
	Savings and thrift plans	Deferred profit sharing plans	Savings and thrift plans	Deferred profit sharing plans	Savings and thrift plans	Deferred profit sharing plans	Savings and thrift plans	Deferred profit sharing plans
Total	100	100	100	100	100	100	100	100
Immediate full vesting	27	22	25	28	29	26	28	16
Cliff vesting ¹ with full vesting after:	19	2	20	1	18	4	20	2
1-2 years	3	-	3	-	2	-	5	-
3-4 years	7	-	7	-	7	-	6	-
5 years	9	-	10	-	8	-	9	-
More than 5 years	1	2	1	1	1	4	(²)	2
Graduated vesting ² with full vesting after:	32	73	31	68	31	69	34	60
4 or fewer years	4	1	3	2	3	1	4	1
5 years	21	7	21	8	21	11	20	3
6 years	1	9	1	8	1	8	2	11
7 years	1	17	1	13	2	10	1	25
8 years	1	(²)	1	1	1	(²)	2	-
9 years	(²)	3	(²)	4	(²)	3	-	4
10 years	4	21	4	20	4	23	5	21
11 years	-	4	-	4	-	5	-	3
12-14 years	-	2	-	4	-	3	-	1
15 years	(²)	8	(²)	5	(²)	5	-	12
Class vesting ⁴ with each class fully vested after:	22	2	24	4	21	1	19	2
1 year	1	-	1	-	(²)	-	1	-
2 years	10	(²)	10	1	10	(²)	10	(²)
3 years	10	1	12	1	10	1	6	1
More than 3 years	1	1	2	2	1	(²)	1	1

¹ Under a cliff vesting schedule, an employee is not entitled to any benefits accrued under the plan until satisfying the requirements for 100 percent vesting.

² Less than 0.5 percent.

³ Graduated vesting schedules give an employee rights to a gradually increasing share of accrued benefits, determined by years of service, eventually reaching 100 percent vesting status.

⁴ Under class-year vesting, employers' contributions for a particular

year (class) become nonforfeitable after employees satisfy vesting requirements. Subsequent years become fully vested as each class matures. Included here are class year schedules with both graduated and cliff vesting features.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Chapter 8. Other Benefits

In addition to the major benefits just described, the survey gathered information on the incidence of 19 others. The data collected show the percent of workers eligible for a specific benefit, but not the proportion of employees actually receiving it. Generally, if these benefits were provided, they covered all of the workers in an employee group (professional-administrative, technical-clerical, and production-service employees) within an establishment (table 104).

Of the 19 benefits, the most frequently offered was employer-subsidized parking, which was available to five-sixths of the employees. Parking benefits included on-site facilities offered without charge and reduced rates at commercial lots.

Another common benefit was educational assistance, which in general provided full or partial reimbursement of employee expenses for books, tuition, and fees. Seventy percent of employees were eligible for job-related educational assistance, while 18 percent were eligible for general educational assistance.

Travel accident insurance, for employees traveling on employer business, and employee discounts on purchases of the employer's goods or services were available to half of all employees.

An on-site infirmary was available to 35 percent of all employees. Two other subsidized health promotion services, wellness programs and employee assistance programs, were surveyed by the Bureau for the first time in 1988. Employee wellness programs were available to 17 percent of the employees. These programs offered structured, separate plans (that is, independent of health insurance), such as exercise and physical fitness programs, weight control clinics, and stress management courses, to develop and maintain healthy life styles. Employee assistance programs (EAP's) were offered to 43 percent of the workers and provided employee referral and counseling services concerning such problems as alcoholism, drug abuse, and mental difficulties. EAP's are closely related to employee wellness programs and typically deal with more serious personal problems than the essentially medical problems included in wellness programs.

One in four of all employees were eligible to use employer-provided recreation facilities. In the area of financial and legal services, 10 percent of employees were eligible for financial counseling and 4 percent were eligible for prepaid legal services.

Fewer than 10 percent of employees were eligible for each of the following benefits: Supplemental unemployment benefits, subsidized commuting, and employer financial assistance for adoption proceedings. Employer-subsidized child care, a benefit that has received much attention in recent years, was available to 4 percent of employees, up from 1 percent in 1985, the most recent survey period for which comparable data were reported. Child care benefits were limited to employer-subsidized facilities or full or partial reimbursement for the cost of caring for a child in a nursery, day care center, or by a baby sitter, on or off the employer's premises. Situations where employers did not subsidize facilities or provided only information and referral services were not included.³⁵

The incidence of several benefits differed markedly by employee group, with a larger proportion of professional-administrative employees usually covered. For example, full or partial payment by the employer of relocation expenses for transferred or newly hired employees was available to five-eighths of the professional-administrative employees, but to only three-tenths of the technical-clerical employees and one-fifth of the production-service employees. Job-related travel accident insurance was available to five-eighths of the white-collar employees, almost twice the proportion of blue-collar workers covered. Severance pay, subsidized meals, wellness programs, financial counseling, employer assistance for adoptions and child care, and subsidized commuting were other benefits found almost twice as frequently among white-collar workers than blue-collar workers. Only supplemental unemployment benefits were substantially more common among blue-collar employees than white-collar employees.

For nearly all benefits reported in this section, a larger proportion of employees were eligible for benefits under the old scope survey than in the more comprehensive survey, with its increased establishment and industrial coverage. Differences in the incidence of benefits such as severance pay, job-related travel insurance, employee assistance programs, and relocation allowances were most pronounced and reflect the lower incidence for these items in smaller establishments and services industries not previously studied.

³⁵ For further analysis of child care, see Howard V. Hayghe, "Employers and Child Care: What Roles Do They Play?" *Monthly Labor Review*, September 1988, pp.38-44.

Table 104. Other benefits: Percent of full-time employees eligible for specified benefits, medium and large firms, 1988

Benefit	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Income continuation plans:				
Severance pay	42	54	51	30
Supplemental unemployment benefits	6	3	3	8
Transportation benefits:				
Free or subsidized employee parking	84	83	80	87
Subsidized commuting	5	7	7	3
Job-related travel accident insurance	49	66	58	34
Gifts and cash bonuses:				
Gifts	16	18	15	15
Nonproduction bonuses	22	20	21	24
Financial and legal services:				
Financial counseling	10	13	12	7
Prepaid legal services	4	3	4	5
Family benefits:				
Employer assistance for child care	4	6	6	2
Employer assistance for adoption	5	8	8	2
Health promotion programs:				
In-house infirmary	35	42	35	31
Wellness programs	17	24	22	11
Employee assistance programs	43	52	47	36
Miscellaneous benefits:				
Employee discounts	52	53	56	49
Employer-subsidized recreation facilities	25	31	24	21
Subsidized meals	21	28	26	15
Relocation allowance	33	64	28	18
Education assistance:				
Job related	70	82	79	59
Not job related	18	19	19	16

Chapter 9. Plan Administration

In addition to the data on individual benefit plans, the survey examined how insurance and retirement benefits were administered and whether benefits were offered independently or as part of a flexible benefits program.

Plan sponsor

Single employers were the predominant sponsors of health, life, sickness and accident, and long-term disability insurance and defined benefit pension plans in medium and large firms (table 105). Nearly all participants in life insurance, health insurance, long-term disability insurance, and defined benefit pension plans were in single-employer plans. Seventy-seven percent of sickness and accident insurance participants were in single-employer plans; most of the remaining participants were in State temporary disability benefit plans. (State disability benefit plans are discussed in chapter 4.)

Multiemployer plans result from agreements between employers within an industry or related industries and one or more labor unions. These plans allow employees moving from one employer to another within an industry to receive the same or similar benefits. Defined benefit pension and health insurance plans were the most common benefits sponsored by multiemployer groups, and production-service employees were the most likely recipients of such benefits. The scope of the survey, which excludes establishments with under 100 employees; notably in such industries as contract construction and trucking, accounts, in part, for the small representation of multiemployer plans.

Flexible benefits plans and reimbursement accounts

Traditionally, employers have offered their workers plans in a number of benefit areas, such as health insurance, life insurance, and retirement. Employees may have a choice between one plan or more in a benefit area, for example, between a commercial health insurance plan and a health maintenance organization, but plans in each benefit area are offered separately. In recent years, however, new approaches to offering benefits have attracted considerable attention. Since 1986, BLS has studied two arrangements for offering such benefits—flexible benefits plans and reimbursement accounts (table 106).

Nearly 4 million—13 percent—employees in medium and large firms were offered flexible benefits plans, reimbursement accounts, or both in 1988, up substantially from the 5 percent reported in 1986, when the Bureau first provided such estimates. (The comparable 1988 figure for

the old scope establishments was 15 percent.) Flexible benefits plans and reimbursement accounts were more common among white-collar workers (19 percent) than among blue-collar workers (6 percent).

Flexible benefits plans (also known as cafeteria plans) covered 5 percent of all workers.³⁶ These arrangements allow employees to choose between two types of benefits or more. The most common choices offered were health, life, and long-term disability insurance; and the option of receiving cash instead of benefits. In addition, flexible benefits plans with a cash option often allowed employees to transfer the cash to a tax-deferred plan and, through a salary reduction arrangement, make pretax contributions for additional retirement savings coverage.³⁷ Less common choices include added sick leave and vacation days, child care expenses, sickness and accident insurance, and group legal services. Pensions are usually fixed benefits and not part of a flexible benefits program.

Reimbursement accounts, which provide funds for employees to pay expenses not covered by the regular benefits package, were available to 12 percent of all workers. These accounts, also called flexible spending accounts, are usually financed by employee pretax money, although some accounts are funded either wholly or partly by employers. Reimbursement accounts may be part of a flexible benefits plan or they may stand alone.

More than three-quarters of employees eligible for reimbursement accounts could allocate funds for health care deductibles and coinsurance, health expenses not covered by their health care plan, and costs of dependent care. One-half to three-quarters could allocate funds for payment of their share of health care premiums, and less than one-fifth could use their reimbursement account funds to pay for legal services and other insurance premiums (such as life insurance).

Nine of ten employees participating in flexible benefits plans or reimbursement accounts were required to contribute toward the cost of their benefits, or were allowed to contribute to obtain additional benefits. Nearly all of these contributions were in the form of a salary reduction arrangement.

Individual benefits offered through a flexible benefits plan were analyzed and included in the tabulations for specific benefit areas in this bulletin.

³⁶ For this survey, a plan had to allow choices among two or more types of benefits to be classified as a flexible benefits plan. Thus, plans that permitted a selection in only one benefit (for example, a choice among several health insurance options or plans) were not classified as flexible benefits plans.

³⁷ Regulations covering section 125 of the Internal Revenue Code allow employees to designate a portion of their salary for full or partial payment of certain benefit costs. Such salary reduction arrangements are exempt from Federal income tax.

Table 105. Plan administration: Percent of full-time participants in selected benefits by type of plan sponsor, medium and large firms, 1988

Plan sponsor	Health insurance	Life insurance	Sickness and accident insurance	Long-term disability insurance	Defined benefit pension
All participants					
Total	100	100	100	100	100
Single employer	95	97	77	100	93
Multiemployer ¹	5	2	3	(²)	6
Mandated benefits ³	-	-	20	-	-
Employer association ⁴	(²)	(²)	-	-	(²)
Data not available	-	(²)	-	-	-
Professional and administrative					
Total	100	100	100	100	100
Single employer	99	100	72	100	99
Multiemployer ¹	1	(²)	(²)	(²)	1
Mandated benefits ³	-	-	28	-	-
Employer association ⁴	(²)	(²)	-	-	1
Data not available	-	(²)	-	-	-
Technical and clerical					
Total	100	100	100	100	100
Single employer	98	99	71	100	98
Multiemployer ¹	2	1	(²)	(²)	2
Mandated benefits ³	-	-	29	-	-
Employer association ⁴	(²)	(²)	-	-	1
Data not available	-	(²)	-	-	-
Production and service					
Total	100	100	100	100	100
Single employer	91	95	81	100	88
Multiemployer ¹	9	4	4	-	12
Mandated benefits ³	-	-	15	-	-
Employer association ⁴	(²)	-	-	-	(²)
Data not available	-	(²)	-	-	-

¹ Individual employers in the same or in a related industry contributing a negotiated amount to trust fund providing benefits for employees covered under a collective bargaining agreement.

² Less than 0.5 percent.

³ The majority of the participants with mandated sickness and accident insurance benefits were covered by State temporary disability plans. The remaining employees (1 percent) were covered by the Railroad Un-

employment Insurance Act.

⁴ Band of small employers in a common trade or business, for example, savings and loan associations. The plan sponsored by the association is not negotiated with the employees.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 106. Flexible benefits plans and reimbursement accounts: Percent of full-time employees eligible, medium and large firms, 1988

Coverage	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Eligible for flexible benefits and/or reimbursement accounts	13	20	18	6
Flexible benefits	5	7	8	2
With reimbursement accounts	4	7	7	1
Reimbursement accounts	12	20	17	5
Freestanding reimbursement accounts	8	13	10	4
Not eligible for flexible benefits or reimbursement accounts	87	80	82	94

¹ Flexible benefits plans, also known as flexible compensation and cafeteria plans, allow employees to choose between two or more benefits or benefit options, including cash, in determining their individual benefit packages. Reimbursement (flexible spending) accounts, which are used to finance benefits or expenses unpaid by insurance or benefit plans, may be part of a flexible benefits program or stand alone (freestanding accounts). These accounts may be financed by the employer, employee, or both. The employee contribution is usually made through a salary reduction arrangement.

NOTE: Sums of individual items do not equal totals because some employees were eligible for both flexible benefits plans and reimbursement accounts.

Chapter 10. Survey Comparability

As an aid to survey users seeking to trace changes in benefit plans over the years, the sample of establishments studied in 1988 was selected so as to permit comparisons of findings with the 1979-86 surveys. This chapter presents several tables containing data limited to these old scope establishments. The tables presented were chosen because they contain major findings of the survey, or because they present items affected by the scope change (tables 107-126). (See appendix A for

a detailed description of the scope of the 1988 and prior private sector surveys.)

Additional old scope tables, paralleling the tables presented throughout this bulletin for the expanded survey scope, are available upon request from the Office of Compensation and Working Conditions, Bureau of Labor Statistics, Washington, D.C. 20212. The charge for furnishing these tables is limited to the cost of their production.

Table 107. Summary: Percent of full-time employees by participation¹ in employee benefit programs, medium and large firms,² 1988, former survey coverage

Employee benefit program	All employees ³	Professional and administrative employees ³	Technical and clerical employees ³	Production and service employees ³	Employee benefit program	All employees ³	Professional and administrative employees ³	Technical and clerical employees ³	Production and service employees ³
Paid:					Dental insurance ⁴	66	73	66	62
Holidays	98	99	100	97	Employee coverage:				
Vacations	99	100	100	98	Wholly employer financed	43	44	36	47
Personal leave	25	33	35	14	Partly employer financed	23	30	30	15
Lunch period	9	4	5	16	Family coverage:				
Rest time	70	56	66	81	Wholly employer financed	34	33	27	39
Funeral leave	88	87	89	89	Partly employer financed	33	40	39	24
Jury duty leave	94	97	97	90	Life insurance	94	97	95	92
Military leave	65	74	69	58	Wholly employer financed	82	84	82	81
Sick leave	70	92	91	45	Partly employer financed	12	13	14	11
Maternity leave	2	3	2	2	Defined benefit pension	70	72	68	71
Paternity leave	1	2	1	1	Wholly employer financed	66	67	64	66
					Partly employer financed	4	5	4	4
Unpaid:					Defined contribution ⁵	52	68	62	37
Maternity leave	33	37	34	31	Retirement ⁶	34	44	42	24
Paternity leave	16	19	17	13	Wholly employer financed ⁷	14	15	17	11
					Partly employer financed	21	29	25	13
Sickness and accident insurance	49	31	37	65	Capital accumulation ⁸	19	25	21	14
Wholly employer financed	40	24	31	56	Wholly employer financed ⁷	4	3	3	4
Partly employer financed	8	7	6	10	Partly employer financed	15	22	18	10
Long-term disability insurance	47	67	57	29	All retirement ⁹	86	89	86	83
Wholly employer financed	37	52	45	24	Stock option	(10)	(10)	(10)	(10)
Partly employer financed	10	15	12	5	Stock purchase	3	4	3	1
Medical insurance	92	93	92	91					
Employee coverage:									
Wholly employer financed	51	48	44	57					
Partly employer financed	41	45	48	34					
Family coverage:									
Wholly employer financed	34	30	26	41					
Partly employer financed	58	64	66	50					

¹ Participants are workers covered by a paid time off, insurance, retirement, or capital accumulation plan. Workers eligible for paid or unpaid maternity and paternity leave are also covered. Employees subject to a minimum service requirement before they are eligible for benefit coverage are counted as participants even if they have not met the requirement at the time of the survey. If employees are required to pay part of the cost of a benefit, only those who elect the coverage and pay their share are counted as participants. Benefits for which the employee must pay the full premium are outside the scope of the survey. Only current employees are counted as participants; retirees are excluded.

² See appendix A for scope of study.

³ See appendix A for definitions of the occupational groups.

⁴ The figures for dental insurance differ slightly from those published in table 1 of the April 4, 1989 news release, "BLS Reports on Employee Benefits in Medium and Large Firms in 1988," USDL: 89-160.

⁵ Defined contribution plans include money purchase pension plans, and profit sharing, savings and thrift, stock bonus, and employee stock ownership plans. The total is less than the sum of the individual items because some employees participated in both defined contribution retire-

ment and capital accumulation plans.

⁶ Defined contribution plans were classified as retirement plans if employer contributions had to remain in the participant's account until retirement age, death, disability, separation from service, age 59 1/2, or hardship.

⁷ Employees participating in two or more plans are counted as participants in wholly employer-financed plans only if all plans are noncontributory.

⁸ Includes plans in which employer contributions may be withdrawn from participant's account prior to retirement age, death, disability, separation from service, age 59 1/2, or hardship.

⁹ Includes defined benefit pension plans and defined contribution retirement plans. The total is less than the sum of the individual items because many employees participated in both types of plans.

¹⁰ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 108. Paid holidays and vacations: Average number of days for full-time participants, medium and large firms, 1988, former survey coverage

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Paid holidays	9.8	10.0	9.7	9.8
Paid vacation by length of service: ¹				
At 6 months	5.5	6.0	5.5	5.1
At 1 year	8.8	10.2	9.4	7.7
At 3 years	10.5	11.0	10.5	10.3
At 5 years	12.8	13.6	13.2	12.1
At 10 years	15.9	16.6	16.0	15.4
At 15 years	18.4	19.0	18.8	17.7
At 20 years	20.5	21.0	20.5	20.1
At 25 years	22.1	22.6	22.2	21.6
At 30 years ²	22.6	23.2	22.7	22.1

¹ Participants are included only for the service periods for which they receive vacations.

² The average (mean) was essentially the same for longer lengths of service.

NOTE: Computation of average included half days and excluded workers with zero holidays or vacation days.

Table 109. Paid holidays: Percent of full-time employees by number of paid holidays provided each year, medium and large firms, 1988, former survey coverage

Number of days	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Provided paid holidays	96	99	100	97
Under 5 days	1	1	(¹)	2
5 days	2	1	2	3
5 days plus 1 half day	(¹)	(¹)	(¹)	(¹)
6 days	5	4	6	5
6 days plus 1 or 2 half days	(¹)	(¹)	(¹)	(¹)
7 days	7	5	7	8
7 days plus 1 or more half days	(¹)	1	1	(¹)
8 days	9	10	11	7
8 days plus 1 or 2 half days	1	1	1	1
9 days	9	9	9	8
9 days plus 1 or more half days	1	2	2	1
10 days	24	26	27	21
10 days plus 1 or more half days	(¹)	(¹)	(¹)	(¹)
11 days	16	14	15	17
11 days plus 1 or 2 half days	1	1	1	(¹)
12 days	12	16	12	10
12 days plus 1 or 2 half days	(¹)	(¹)	(¹)	(¹)
13 days	7	7	4	9
13 days plus 2 half days	(¹)	(¹)	(¹)	(¹)
14 days	2	2	1	2
More than 14 days	1	(¹)	(¹)	1
Number of days not available	(¹)	-	-	(¹)
Not provided paid holidays	2	1	(¹)	3

¹ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 110. Paid vacations: Percent of full-time employees by amount of paid vacation provided at selected periods of service, medium and large firms, 1988, former survey coverage

Vacation policy	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees	Vacation policy	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100	At 5 years of service—Continued				
Provided paid vacations ¹	99	100	100	98	Over 5 and under 10 days	(¹) 42	(¹) 30	(¹) 36	(¹) 53
At 6 months of service:					Over 10 and under 15 days	7	7	6	8
Under 5 days	5	2	4	7	15 days	45	56	54	34
5 days	41	48	50	31	Over 15 and under 20 days	2	1	2	1
Over 5 and under 10 days	10	16	12	4	20 days	2	5	2	(¹)
10 days	4	5	6	2	Over 20 and under 25 days	(¹)	1	(¹)	(¹)
Over 10 and under 15 days	(¹)	1	(¹)	(¹)	25 days and over	(¹)	(¹)	(¹)	(¹)
15 days	(¹)	1	(¹)	(¹)					
Over 15 days	(¹)	1	(¹)	(¹)	At 10 years of service:				
At 1 year of service:					Under 5 days	(¹)	(¹)	(¹)	(¹)
Under 5 days	(¹)	(¹)	(¹)	(¹)	5 days	(¹)	(¹)	(¹)	(¹)
5 days	29	9	15	48	Over 5 and under 10 days	(¹)	-	-	-
Over 5 and under 10 days	1	(¹)	1	1	10 days	7	3	5	11
10 days	63	78	78	46	Over 10 and under 15 days	1	(¹)	(¹)	1
Over 10 and under 15 days	2	3	3	1	15 days	64	62	69	63
15 days	3	7	2	1	Over 15 and under 20 days	7	5	5	10
Over 15 and under 20 days	(¹)	(¹)	(¹)	(¹)	20 days	18	27	19	12
20 days	1	2	(¹)	(¹)	Over 20 and under 25 days	1	2	1	(¹)
Over 20 and under 25 days	(¹)	1	(¹)	(¹)	25 days	(¹)	(¹)	(¹)	(¹)
25 days and over	(¹)	(¹)	-	-	Over 25 days	1	1	1	1
At 3 years of service:					At 15 years of service:				
Under 5 days	(¹)	(¹)	(¹)	(¹)	Under 5 days	(¹)	(¹)	(¹)	(¹)
5 days	3	1	1	5	5 days	(¹)	(¹)	(¹)	(¹)
Over 5 and under 10 days	1	(¹)	(¹)	2	Over 5 and under 10 days	(¹)	-	-	-
10 days	79	77	86	76	10 days	3	2	2	5
Over 10 and under 15 days	7	6	5	9	Over 10 and under 15 days	(¹)	(¹)	(¹)	(¹)
15 days	7	12	6	5	15 days	26	18	21	32
Over 15 and under 20 days	(¹)	1	(¹)	(¹)	Over 15 and under 20 days	5	5	5	5
20 days	1	2	1	(¹)	20 days	61	70	68	51
Over 20 and under 25 days	(¹)	1	(¹)	(¹)	Over 20 and under 25 days	2	2	1	2
25 days and over	(¹)	(¹)	-	-	25 days	1	2	1	1
At 5 years of service:					Over 25 and under 30 days	(¹)	(¹)	1	1
Under 5 days	(¹)	(¹)	(¹)	(¹)	30 days	(¹)	(¹)	(¹)	(¹)
5 days	(¹)	(¹)	(¹)	1	Over 30 days	(¹)	(¹)	(¹)	(¹)

See footnotes at end of table.

Table 110. Paid vacations: Percent of full-time employees by amount of paid vacation provided at selected periods of service, medium and large firms, 1988, former survey coverage—Continued

Vacation policy	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees	Vacation policy	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
At 20 years of service:					At 25 years of service—Continued				
Under 5 days	(¹)	(¹)	(¹)	(¹)	20 days	31	33	35	28
5 days	(¹)	(¹)	(¹)	(¹)	Over 20 and under 25 days	3	3	3	2
Over 5 and under 10 days	(¹)	-	-	(¹)	25 days	45	49	45	41
10 days	3	2	1	5	Over 25 and under 30 days	2	1	1	2
Over 10 and under 15 days	(¹)	(¹)	(¹)	(¹)	30 days	4	4	3	5
15 days	11	7	10	14	Over 30 days	1	(¹)	1	1
Over 15 and under 20 days	1	1	1	1	At 30 years of service: ³				
20 days	55	60	62	48	Under 5 days	(¹)	(¹)	(¹)	(¹)
Over 20 and under 25 days	3	3	3	4	5 days	(¹)	(¹)	(¹)	(¹)
25 days	24	26	20	24	Over 5 and under 10 days	(¹)	-	-	(¹)
Over 25 and under 30 days	1	1	1	1	10 days	3	2	1	5
30 days	1	1	(¹)	(¹)	Over 10 and under 15 days	(¹)	(¹)	(¹)	(¹)
Over 30 days	(¹)	(¹)	(¹)	1	15 days	10	6	9	13
At 25 years of service					Over 15 and under 20 days	1	(¹)	1	1
Under 5 days	(¹)	(¹)	(¹)	(¹)	20 days	30	32	34	27
5 days	(¹)	(¹)	(¹)	(¹)	Over 20 and under 25 days	2	2	2	2
Over 5 and under 10 days	(¹)	-	-	(¹)	25 days	39	43	41	36
10 days	3	2	1	5	Over 25 and under 30 days	1	1	1	2
Over 10 and under 15 days	(¹)	(¹)	(¹)	(¹)	30 days	11	13	9	12
15 days	10	6	9	13	Over 30 days	1	1	2	1
Over 15 and under 20 days	1	(¹)	1	1	Not provided paid vacations	1	(¹)	(¹)	2

¹ Employees receiving no paid vacations in their early years of service are included in the overall percentage of workers provided paid vacations; however, they are disregarded in computing the distributions by length of service up to the service period at which they become eligible for vacations.

² Less than 0.5 percent.

³ Provisions were virtually the same after longer years of service.

NOTE: Data include anniversary year bonus days. Dash indicates no employees in this category.

Table 111. Paid military leave: Percent of full-time employees by number of paid military leave days available per year, medium and large firms, 1988, former survey coverage

Number of days	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Provided paid military leave	65	74	69	58
5 days	1	2	2	1
10 days	40	45	42	36
11-14 days	2	2	2	1
15 days	3	3	3	2
16-19 days	1	2	2	1
20 days	1	1	1	1
21-24 days	(¹)	(¹)	(¹)	(¹)
30 days	1	1	1	2
More than 30 days	(¹)	1	1	(¹)
No maximum specified ²	15	17	14	14
Number of days not available	(¹)	(¹)	(¹)	(¹)
Not provided paid military leave	35	26	31	42

¹ Less than 0.5 percent.

² Military leave is provided as needed.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 112. Short-term disability coverage: Percent of full-time employees by participation in sickness and accident insurance plans and paid sick leave plans, medium and large firms, 1988, former survey coverage

Type of plan	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
With short-term disability coverage ..	92	96	96	88
Sickness and accident insurance only	22	4	5	43
Wholly employer financed	19	3	4	38
Paid sick leave only	44	65	59	23
Combined sickness and accident insurance/paid sick leave	26	26	32	23
Wholly employer financed	21	21	27	16
Without short-term disability coverage	8	4	4	12

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 113. Paid sick leave: Average number of days at full pay for full-time participants by type of plan, medium and large firms, 1988, former survey coverage

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Paid annual sick leave ¹ by length of service:				
At 6 months	11.5	15.9	8.4	9.4
At 1 year	14.3	20.4	11.9	10.3
At 3 years	17.6	25.5	15.2	11.8
At 5 years	22.3	33.0	19.7	13.9
At 10 years	29.3	44.1	26.7	16.7
At 15 years	33.4	49.6	30.9	19.4
At 20 years	36.2	53.5	33.7	21.0
At 25 years	37.9	55.7	35.2	22.5
At 30 years ²	38.6	56.8	36.0	22.6
Paid per disability sick leave ³ by length of service:				
At 6 months	54.3	60.2	45.6	48.3
At 1 year	54.2	63.6	47.1	38.0
At 3 years	58.5	68.5	54.0	40.1
At 5 years	74.6	81.8	73.0	59.3
At 10 years	91.2	98.3	93.5	70.1
At 15 years	106.3	109.2	110.2	93.6
At 20 years	119.0	117.9	123.0	115.6
At 25 years	131.0	125.9	135.4	136.8
At 30 years ²	131.5	126.4	135.9	137.5

¹ Employees earn a specified number of sick leave days per year. This number may vary by length of service.

² The average (mean) was virtually the same after longer years of service.

³ Employees earn a specified number of sick leave days for each illness or disability. This number may vary by length of service.

NOTE: Computation of average excluded days paid at partial pay and workers with only partial pay days or zero days of sick leave.

Table 114. Sickness and accident insurance: Percent of full-time participants by type and duration of payments, medium and large firms, 1988, former survey coverage

Type of payment	Total	Maximum weeks of coverage						Varies by service
		Less than 13	13	14-25	26	27-51	52	
All participants								
All types	100	1	10	4	62	2	16	5
Fixed percent of earnings	49	1	4	2	37	(1)	3	2
Less than 50	(1)	-	(1)	-	(1)	-	-	-
50	19	(1)	1	1	16	-	(1)	(1)
55	(1)	-	-	-	(1)	(1)	-	(1)
60	13	(1)	1	1	8	(1)	1	1
65	1	-	(1)	(1)	(1)	-	-	(1)
66	(1)	-	(1)	-	(1)	-	-	-
67	11	-	1	(1)	9	-	1	(1)
70	3	-	(1)	(1)	2	-	(1)	(1)
75	2	(1)	(1)	(1)	1	-	-	1
80	1	(1)	-	(1)	1	-	-	(1)
Over 80	(1)	-	-	-	(1)	-	-	-
Percent of earnings varies	7	(1)	(1)	(1)	3	1	2	(1)
By service	3	-	-	(1)	2	-	1	(1)
By length of disability	2	(1)	(1)	(1)	(1)	(1)	1	(1)
By both service and length of disability	1	-	-	-	1	(1)	-	-
By earnings	1	-	-	-	(1)	1	-	-
Fixed weekly dollar benefit	30	(1)	5	1	19	1	3	2
Less than \$60	4	-	2	(1)	2	(1)	-	-
\$60-\$79	2	(1)	1	-	1	-	(1)	-
\$80-\$99	2	-	(1)	-	1	-	-	-
\$100-\$119	5	(1)	1	(1)	4	-	-	-
\$120-\$139	4	-	(1)	(1)	4	-	(1)	-
\$140-\$159	4	-	(1)	(1)	3	-	(1)	-
\$160-\$179	2	-	(1)	-	1	(1)	(1)	-
\$180-\$199	2	-	-	-	(1)	(1)	1	1
\$200-\$219	3	-	(1)	(1)	1	(1)	1	1
\$220 or more	3	-	-	-	1	(1)	1	1
Weekly dollar benefit varies	13	(1)	(1)	-	3	(1)	9	1
By earnings	13	(1)	(1)	-	3	(1)	9	1
By service or length of disability	1	-	(1)	-	(1)	(1)	-	(1)
Data not available	(1)	-	-	-	(1)	-	-	-
Professional and administrative								
All types	100	1	8	6	69	2	11	3
Fixed percent of earnings	68	1	6	5	54	(1)	1	2
Less than 50	1	-	1	-	1	-	-	-
50	25	(1)	1	(1)	23	-	(1)	(1)
55	(1)	-	-	-	(1)	-	-	-
60	18	1	2	2	13	(1)	(1)	1
65	1	-	-	1	(1)	-	-	-
66	(1)	-	(1)	-	(1)	-	-	-
67	13	-	1	1	11	-	1	(1)
70	4	-	(1)	(1)	3	-	-	(1)
75	5	-	1	(1)	2	-	-	1
80	1	-	-	(1)	1	-	-	-
Over 80	(1)	-	-	-	(1)	-	-	-
Percent of earnings varies	12	1	(1)	1	2	2	6	(1)
By service	5	-	-	(1)	1	-	4	-
By length of disability	4	1	(1)	1	-	1	2	(1)
By both service and length of disability	1	-	-	-	1	-	-	-
By earnings	2	-	-	-	(1)	2	-	-

See footnotes at end of table.

Table 114. Sickness and accident insurance: Percent of full-time participants by type and duration of payments, medium and large firms, 1988, former survey coverage—Continued

		Maximum weeks of coverage						Varies by service
Type of payment	Total	Less than 13	13	14-25	26	27-51	52	
Professional and administrative—Continued								
Fixed weekly dollar benefit	13	()	2	()	10	-	()	-
Less than \$60	4	-	()	-	3	-	-	-
\$60-\$79	1	()	1	-	()	-	-	-
\$80-\$99	1	-	()	-	1	-	-	-
\$100-\$119	3	-	1	()	2	-	-	-
\$120-\$139	()	-	-	-	()	-	-	-
\$140-\$159	2	-	()	-	2	-	-	-
\$160-\$179	()	-	-	-	()	-	-	-
\$180-\$199	()	-	-	()	()	-	()	-
\$200-\$219	1	-	()	-	()	-	-	-
\$220 or more	()	-	-	-	()	-	-	-
Weekly dollar benefit varies	7	()	()	-	3	-	4	()
By earnings	7	()	()	-	3	-	4	()
By service or length of disability	()	-	-	-	()	-	-	-
Technical and clerical								
All types	100	1	8	5	72	3	7	3
Fixed percent of earnings	67	1	5	4	53	()	2	2
Less than 50	1	-	()	-	()	-	()	()
50	29	()	1	()	28	()	-	-
55	()	-	-	-	()	()	()	1
60	15	1	2	2	9	-	-	()
65	1	-	()	1	()	-	-	-
66	1	-	()	-	()	-	1	()
67	13	-	1	()	11	-	-	()
70	2	-	-	()	2	-	-	1
75	3	-	()	()	1	-	-	()
80	2	()	-	()	-	-	-	-
Percent of earnings varies	14	()	()	1	7	2	3	()
By service	7	-	-	()	4	-	2	()
By length of disability	3	()	()	1	()	()	1	()
By both service and length of disability	2	-	-	-	2	()	-	-
By earnings	2	-	-	-	-	2	-	-
Fixed weekly dollar benefit	14	()	3	()	10	()	()	-
Less than \$60	4	-	()	-	3	()	()	-
\$60-\$79	1	()	()	-	()	-	-	-
\$80-\$99	1	-	()	-	()	-	-	-
\$100-\$119	3	()	1	()	2	-	-	-
\$120-\$139	1	-	-	-	1	-	()	-
\$140-\$159	2	-	()	-	()	-	-	-
\$160-\$179	()	-	-	-	()	-	()	-
\$180-\$199	()	-	()	()	1	-	()	-
\$200-\$219	1	-	-	-	()	-	-	-
\$220 or more	()	-	-	-	-	-	-	-
Weekly dollar benefit varies	5	-	()	-	2	()	2	()
By earnings	5	-	()	-	2	()	2	()
By service or length of disability	()	-	()	-	()	-	-	-

See footnotes at end of table.

Table 114. Sickness and accident insurance: Percent of full-time participants by type and duration of payments, medium and large firms, 1988, former survey coverage—Continued

Type of payment	Total	Maximum weeks of coverage						Varies by service
		Less than 13	13	14-25	26	27-51	52	
Production and service								
All types	100	1	11	3	57	2	20	7
Fixed percent of earnings	39	(¹)	3	2	28	(¹)	3	2
Less than 50	(¹)	-	-	-	(¹)	-	-	-
50	13	(¹)	1	1	11	-	(¹)	(¹)
55	(¹)	-	-	-	(¹)	(¹)	-	(¹)
60	10	(¹)	1	(¹)	6	(¹)	2	1
65	(¹)	-	(¹)	(¹)	-	-	-	(¹)
66	(¹)	-	(¹)	-	(¹)	-	-	-
67	9	-	1	(¹)	8	-	1	(¹)
70	2	-	1	(¹)	2	-	(¹)	(¹)
75	2	(¹)	(¹)	(¹)	1	-	-	1
80	(¹)	(¹)	-	-	(¹)	-	-	(¹)
Percent of earnings varies	3	(¹)	(¹)	(¹)	2	(¹)	-	(¹)
By service	1	-	-	-	1	-	-	(¹)
By length of disability	1	(¹)	(¹)	(¹)	(¹)	-	-	(¹)
By both service and length of disability	1	-	-	-	1	-	-	-
By earnings	(¹)	-	-	-	(¹)	(¹)	-	-
Fixed weekly dollar benefit	41	(¹)	7	1	24	1	4	3
Less than \$60	4	-	2	1	1	(¹)	-	-
\$60-\$79	3	(¹)	1	-	2	-	(¹)	-
\$80-\$99	2	-	1	-	1	-	-	-
\$100-\$119	7	(¹)	2	(¹)	4	-	-	-
\$120-\$139	7	-	1	(¹)	6	-	(¹)	-
\$140-\$159	5	-	(¹)	(¹)	4	-	(¹)	-
\$160-\$179	2	-	(¹)	-	2	(¹)	(¹)	-
\$180-\$199	3	-	-	-	1	1	1	1
\$200-\$219	4	-	-	(¹)	1	1	1	1
\$220 or more	5	-	-	-	2	(¹)	1	1
Weekly dollar benefit varies	18	-	1	-	3	(¹)	13	1
By earnings	17	-	1	-	3	(¹)	13	1
By service or length of disability	1	-	(¹)	-	(¹)	(¹)	-	(¹)
Data not available	(¹)	-	-	-	(¹)	-	-	-

¹ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 115. Long-term disability insurance: Percent of full-time participants by method of determining payment, medium and large firms, 1988, former survey coverage

Method	Total	With maximum coverage provisions	Type of maximum coverage provision			Without maximum coverage provisions
			Plan maximum only ¹	Disability income maximum only ²	Plan and disability income maximum	
All participants						
All methods	100	77	44	14	19	23
Fixed percent of earnings	80	66	35	11	18	14
Less than 50 percent	2	1	1	1	-	(³)
50 percent	22	17	6	6	5	5
55 percent	(³)	(³)	-	(³)	-	(³)
60 percent	44	35	21	3	11	8
65 or 67 percent	12	11	9	1	1	1
70 percent or more	1	1	1	-	(³)	(³)
Percent varies by earnings	8	5	3	1	1	3
Percent varies by service	3	3	3	-	-	1
Scheduled dollar amount varies by earnings	4	(³)	(³)	-	-	4
Other ⁴	4	4	1	3	(³)	1
Professional and administrative						
All methods	100	78	44	13	21	22
Fixed percent of earnings	86	68	40	8	20	18
Less than 50 percent	2	1	1	1	-	(³)
50 percent	19	13	5	3	5	7
60 percent	52	42	25	3	13	10
65 or 67 percent	12	11	9	1	2	1
70 percent or more	1	1	1	-	(³)	(³)
Percent varies by earnings	7	5	3	1	1	3
Percent varies by service	1	(³)	(³)	-	-	(³)
Other ⁴	6	5	1	4	(³)	1
Technical and clerical						
All methods	100	82	47	14	21	18
Fixed percent of earnings	86	73	42	11	20	12
Less than 50 percent	2	1	1	(³)	-	(³)
50 percent	22	19	5	7	6	3
55 percent	(³)	(³)	-	(³)	-	(³)
60 percent	46	38	24	2	12	8
65 or 67 percent	15	14	11	1	2	(³)
70 percent or more	1	1	1	-	(³)	(³)
Percent varies by earnings	9	5	3	1	1	4
Percent varies by service	2	1	1	-	-	1
Scheduled dollar amount varies by earnings	(³)	-	-	-	-	(³)
Other ⁴	3	2	(³)	2	-	1

Table 115. Long-term disability insurance: Percent of full-time participants by method of determining payment, medium and large firms, 1988, former survey coverage—Continued

Method	Total	With maximum coverage provisions	Type of maximum coverage provision			Without maximum coverage provisions
			Plan maximum only ¹	Disability income maximum only ²	Plan and disability income maximum	
Production and service						
All methods	100	71	43	15	14	29
Fixed percent of earnings	66	55	29	13	13	11
Less than 50 percent	1	1	(³)	1	-	(³)
50 percent	27	22	7	10	4	5
55 percent	(³)	(³)	-	(³)	-	-
60 percent	29	24	14	2	8	5
65 or 67 percent	8	7	6	(³)	1	1
70 percent or more	1	1	1	-	(³)	-
Percent varies by earnings	6	4	3	(³)	1	3
Percent varies by service	9	9	9	-	-	(³)
Scheduled dollar amount varies by earnings	15	(³)	(³)	-	-	15
Other ⁴	3	3	2	1	(³)	(³)

¹ Includes flat dollar maximums and dollar maximums that vary by years of service.

² Includes ceilings on income during disability that limit the total amount payable from the long-term disability insurance plus other income, such as dependent Social Security and rehabilitative employment income.

³ Less than 0.5 percent.

⁴ Includes flat dollar amounts and scheduled percent of earnings varying by length of disability.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 116. Health care benefits: Percent of full-time participants by coverage for selected categories of care, medium and large firms, 1988, former survey coverage

Table 116. Health care benefits: percent of total time paid for large firms, 1988, former survey coverage							
Category of medical care	Total	Care provided					Care not provided ¹
		All	Covered in full	Subject to internal limits only ²	Subject to overall limits only ³	Subject to internal and overall limits	
All participants							
Hospital room and board	100	99	23	1	37	37	1
Hospitalization—miscellaneous services ⁴	100	99	23	2	38	37	1
Extended care facility ⁵	100	79	9	16	11	43	21
Home health care ⁵	100	76	24	9	13	30	24
Inpatient surgery	100	99	34	1	52	12	1
Outpatient surgery ⁶	100	99	39	(¹)	49	10	1
Physician visits—in hospital	100	99	22	1	56	21	1
Physician visits—office	100	98	9	11	71	7	2
Diagnostic X-ray and laboratory	100	99	32	1	51	15	1
Prescription drugs—nonhospital	100	99	3	30	59	3	5
Private duty nursing	100	95	19	(¹)	72	5	3
Mental health care	100	97	(¹)	20	(¹)	77	2
In hospital	100	98	(¹)	23	12	61	4
Outpatient	100	96	(¹)	21	3	73	3
Dental	100	97	(¹)	67	-	3	28
Vision	100	72	1	29	1	3	63
Alcohol abuse treatment	100	37	5	21	3	52	18
Drug abuse treatment	100	82	5	19	3	49	23
Professional and administrative							
Hospital room and board	100	98	27	1	40	31	2
Hospitalization—miscellaneous services ⁴	100	98	26	1	40	31	2
Extended care facility ⁵	100	83	10	17	13	43	17
Home health care ⁵	100	80	26	9	14	31	20
Inpatient surgery	100	98	35	1	54	9	2
Outpatient surgery ⁶	100	98	40	(¹)	51	7	2
Physician visits—in hospital	100	98	24	1	60	14	2
Physician visits—office	100	98	11	12	70	5	2
Diagnostic X-ray and laboratory	100	98	32	1	54	12	2
Prescription drugs—nonhospital	100	98	3	31	58	3	5
Private duty nursing	100	95	23	1	69	5	3
Mental health care	100	97	(¹)	23	(¹)	75	2
In hospital	100	98	(¹)	25	14	56	4
Outpatient	100	96	(¹)	23	3	71	2
Dental	100	98	(¹)	73	-	4	22
Vision	100	78	1	29	1	3	61
Alcohol abuse treatment	100	39	6	22	4	51	17
Drug abuse treatment	100	83	6	21	4	47	22
Technical and clerical							
Hospital room and board	100	99	25	1	41	33	1
Hospitalization—miscellaneous services ⁴	100	99	25	1	41	33	1
Extended care facility ⁵	100	81	9	16	12	44	19
Home health care ⁵	100	80	24	9	14	33	20
Inpatient surgery	100	99	34	(¹)	55	10	1
Outpatient surgery ⁶	100	99	39	(¹)	52	7	1
Physician visits—in hospital	100	99	24	(¹)	58	17	1
Physician visits—office	100	99	11	12	70	6	1
Diagnostic X-ray and laboratory	100	99	33	1	51	14	1
Prescription drugs—nonhospital	100	99	2	30	60	3	5
Private duty nursing	100	95	21	(¹)	69	6	3
Mental health care	100	97	(¹)	22	1	76	1
In hospital	100	99	(¹)	25	13	58	4
Outpatient	100	96	(¹)	23	2	72	2
Dental	100	98	(¹)	68	-	4	28
Vision	100	72	1	28	1	4	62
Alcohol abuse treatment	100	38	6	21	3	54	17
Drug abuse treatment	100	83	5	19	3	52	21

See footnotes at end of table.

Table 116. Health care benefits: Percent of full-time participants by coverage for selected categories of care, medium and large firms, 1988, former survey coverage—Continued

Category of medical care	Total	Care provided					Care not provided ¹
		All	Covered in full	Subject to internal limits only ²	Subject to overall limits only ³	Subject to internal and overall limits	
Production and service							
Hospital room and board	100	99	20	2	34	42	1
Hospitalization—miscellaneous services ⁴	100	99	20	3	34	42	1
Extended care facility ⁵	100	75	8	15	10	42	25
Home health care ⁶	100	72	24	9	11	28	28
Inpatient surgery	100	99	35	1	49	15	1
Outpatient surgery ⁷	100	99	38	(⁷)	46	14	1
Physician visits—in hospital	100	99	19	1	52	27	1
Physician visits—office	100	98	7	10	72	8	2
Diagnostic X-ray and laboratory	100	99	32	(⁷)	49	17	1
Prescription drugs—nonhospital	100	94	3	29	58	3	6
Private duty nursing	100	97	15	(⁷)	75	6	3
Mental health care	100	98	(⁷)	18	(⁷)	80	2
In hospital	100	97	(⁷)	21	10	68	3
Outpatient	100	97	(⁷)	19	3	75	3
Dental	100	68	1	64	-	3	32
Vision	100	36	4	29	1	2	64
Alcohol abuse treatment	100	80	4	20	3	52	20
Drug abuse treatment	100	75	4	18	3	49	25

¹ For all but dental and/or vision care, percents include employees who elected to waive participation in their employer's medical program but who enrolled in dental and/or vision plans.

² Internal limits apply to individual categories of care, e.g., separate limits or benefits for hospitalization. Limits may be set in terms of dollar ceilings on benefits, a requirement that the participant pay a percentage of costs (coinsurance), or a requirement that the participant pay a specific amount (deductible or copayment) before reimbursement begins or services are rendered.

³ Overall limits are expressed only in terms of total benefits payable under the plan, rather than for individual categories of care. Limits are set as deductibles, coinsurance percentages, and overall dollar limits on plan

benefits.

⁴ Services provided during a hospital confinement.

⁵ Some plans provide this care only to a patient who was previously hospitalized and is recovering without need of the extensive care provided by a general hospital. Excludes provisions for hospice care.

⁶ Charges incurred in the outpatient department of a hospital and outside of the hospital.

⁷ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 117. Health care benefits: Percent of full-time participants in medical plans¹ by provision for coverage after retirement, medium and large firms, 1988, former survey coverage

Provision	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
With employer-financed retiree coverage ²	55	58	54	53
For retirees under age 65 only ..	10	8	7	12
For retirees 65 and over only	1	1	1	2
For all retirees	44	50	46	40
Benefits cancelled on retirement or financed wholly by retiree	45	42	46	46
Data not available	(³)	(³)	(³)	(³)

¹ Plans providing services or payments for services rendered in the hospital or by a physician. Excludes plans that provided only dental, vision, or prescription drug coverage.

² Includes plans financed wholly by employers and plans financed jointly by employers and employees.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 118. Life insurance: Percent of full-time participants by method of determining amount of basic life insurance and frequency of related coverages, medium and large firms, 1988, former survey coverage

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Basic life insurance ¹	100	100	100	100
Based on earnings	69	83	81	54
Multiple ²	60	76	75	41
Graduated schedule	9	7	6	13
Flat amount	27	13	18	42
Flat amount based on service	3	3	2	4
Flat amount based on age	(³)	1	1	(³)
With accidental death and dismemberment coverage	73	70	69	78
With survivor income benefit ⁴	10	10	6	13
With availability of partly employer-financed supplemental life insurance	11	13	13	9
With dependent coverage	19	21	22	15

¹ A few participants received only accidental death and dismemberment insurance.

² Includes participants in plans in which insurance equaled a multiple of earnings, plus or minus a specific amount.

³ Less than 0.5 percent.

⁴ Consists of monthly income, usually a percent of earnings, for the spouse or dependent children for a specified period after death of employee.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 119. Life insurance: Percent of full-time participants by effect of retirement on basic life insurance coverage, medium and large firms, 1988, former survey coverage

Effect of retirement	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Insurance continues ¹	58	60	58	57
Continues for life	55	58	55	54
Continues in full	2	2	2	2
Reduced during retirement	53	56	53	52
Once	28	28	29	27
More than once	25	28	23	25
Continues in form of paid-up insurance ²	(³)	(³)	(³)	(³)
Ceases during retirement	1	1	1	(³)
Provision not determinable	2	2	2	3
Insurance discontinued immediately ..	42	40	42	43

¹ Includes plans in which coverage is fully paid by retiree.

² Plan either accumulates permanent amounts of insurance through the contributions of active employees, or provides benefit through a single premium paid by employer.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 120. Defined benefit pension plans:¹ Percent of full-time participants by method of determining retirement payments, medium and large firms, 1988, former survey coverage

Basis of payment ²	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
Terminal earnings formula	54	70	70	36
No alternative formula	26	32	40	15
Terminal earnings alternative	9	11	10	8
Career earnings alternative	3	4	3	2
Dollar amount alternative ³	16	23	17	11
Percent of contributions alternative	(⁴)	(⁴)	(⁴)	(⁴)
Career earnings formula	17	24	17	13
No alternative formula	10	13	11	6
Career earnings alternative	(⁴)	(⁴)	(⁴)	-
Dollar amount alternative ³	7	11	6	5
Percent of contributions alternative	(⁴)	(⁴)	(⁴)	-
Dollar amount formula ³	27	5	10	50
No alternative formula	26	5	10	47
Dollar amount alternative ³	1	-	(⁴)	2
Percent of contributions alternative	(⁴)	-	-	(⁴)
Percent of contributions formula	1	(⁴)	1	1
Cash account	1	1	2	(⁴)

¹ Excludes supplemental pension plans.

² Alternative formulas are generally designed to provide a minimum benefit for employees with short service or low earnings.

³ Includes formulas based on dollar amounts for each year of service and flat monthly benefit varying by service.

⁴ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 121. Defined benefit pension plans:¹ Percent of full-time participants by minimum age and associated service requirements for normal retirement,² medium and large firms, 1988, former survey coverage

Age and service requirement ¹	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants	Age and service requirement ³	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100	Age 62	25	23	22	28
No age requirement	9	4	7	13	No service requirement	4	4	4	4
30 years' service	9	4	7	13	1-4 years' service	(¹)	(¹)	(¹)	(¹)
More than 30 years' service ..	(¹)	(¹)	(¹)	1	5 years' service	(¹)	(¹)	(¹)	(¹)
Age 51-54	(¹)	-	-	(¹)	10 years' service	13	11	10	17
30 years' service	(¹)	-	-	(¹)	11-14 years' service	(¹)	(¹)	(¹)	(¹)
Age 55	3	4	1	3	15 or 20 years' service	2	3	3	2
20 years' service	1	3	(¹)	2	25 years' service	2	2	1	2
30 years' service	1	1	(¹)	2	30 years' service	3	3	4	3
More than 30 years' service ..	1	-	(¹)	2	Age 63-64	1	1	2	1
Age 56-59	1	1	1	2	No service requirement	(¹)	(¹)	(¹)	-
15 or 20 years' service	(¹)	-	-	1	10 years' service	1	1	2	1
30 years' service	(¹)	-	-	1	20 years' service	(¹)	-	-	(¹)
More than 30 years' service ..	1	1	1	1	Age 65	31	30	33	30
Age 60	14	19	15	11	No service requirement	27	27	29	26
No service requirement	4	6	5	3	1-4 years' service	(¹)	-	-	(¹)
1-5 years' service	2	4	2	1	5 years' service	1	1	1	2
10 years' service	3	3	3	2	10 years' service	2	2	2	1
15 or 20 years' service	3	3	3	3	15 or more years' service	1	1	1	1
25 years' service	1	1	1	(¹)	Sum of age plus service ⁴	15	19	20	11
30 years' service	2	2	2	1	Equals fewer than 80	2	2	2	1
More than 30 years' service ..	(¹)	(¹)	(¹)	(¹)	Equals 80	1	1	1	1
Age 61	1	1	(¹)	1	Equals 85	6	8	6	5
20 or fewer years' service	1	(¹)	(¹)	1	Equals 90	5	5	9	3
26-29 years' service	(¹)	(¹)	(¹)	(¹)	Equals 95	(¹)	(¹)	(¹)	(¹)
					Equals more than 95	(¹)	(¹)	(¹)	-

¹ Excludes supplemental pension plans.

² Normal retirement is defined as the point at which the participant could retire and immediately receive all accrued benefits by virtue of service and earnings, without reduction due to age.

³ If a plan had alternative age and service requirements, the earliest age and associated service were tabulated; if one alternative did not specify an age, it was the requirement tabulated.

⁴ Less than 0.5 percent.

⁵ In some plans, participants must also satisfy a minimum age or service requirement.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

Table 122. Defined benefit pension plans:¹ Percent of full-time participants in plans granting ad hoc postretirement lump sum payments and annuity increases,² medium and large firms, 1988, former survey coverage

Characteristics	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Total	100	100	100	100
With lump sum payment or ad hoc pension increases in the 1983-87 period	31	29	28	34
Ad hoc increases only	25	25	26	24
Lump sum payments only	1	1	1	2
Ad hoc increases and lump sum payment	5	3	2	8
Without lump sum payment or ad hoc pension increases in the 1983-87 period	68	70	71	66
Not determinable	1	1	1	(?)

¹ Excludes supplemental pension plans.

² Unscheduled increases in pension payments for employees retiring prior to 1988.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 123. Retirement and capital accumulation plan coverage: Percent of full-time employees by participation in retirement plans and capital accumulation plans, medium and large firms, 1988, former survey coverage

Type of plan	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Total	100	100	100	100
Covered by retirement or capital accumulation plan	88	91	88	85
Retirement ¹ only	69	86	67	71
Capital accumulation ² only	2	2	2	2
Retirement and capital accumulation	17	23	19	12
Not covered by retirement or capital accumulation plan	12	9	12	15

¹ Includes defined benefit pension plans and defined contribution plans such as money purchase pension, profit sharing, and savings and thrift plans in which employer contributions must remain in the participant's account until retirement age, death, disability, separation from service, age 59 1/2, or hardship.

² Includes plans in which employer contributions may be withdrawn from participant's account prior to retirement age, death, disability, separation from service, age 59 1/2, or hardship. Excludes pure cash profit sharing, stock option, and stock purchase plans.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 124. Defined contribution and stock plans: Percent of full-time employees participating by type of plan, medium and large firms, 1988, former survey coverage

Type of plan	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Savings and thrift ¹	32	47	39	19
Profit sharing	21	23	24	18
Immediate cash only	1	1	1	1
Deferred benefits only	17	19	18	14
Combination	4	4	5	3
Employee stock ownership	2	3	4	1
Money purchase pension	3	4	4	2
Stock bonus	(?)	(?)	(?)	-

¹ Includes 0.2 percent of employees in plans with both matching and nonmatching employer contributions. Not all participants in such plans may elect or be required to contribute.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 125. Cash or deferred arrangements:¹ Percent of full-time employees participating in plans permitting employee contributions with pretax dollars, medium and large firms, 1988, former survey coverage

Item	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Percent of all employees in plans with cash or deferred arrangement ²	42	59	49	28
Salary reduction plans ³	40	57	45	27
Savings and thrift plans	27	42	33	15
Profit sharing plans	9	10	8	8
Supplemental contributions to money purchase pension plans	(⁴)	(⁴)	(⁴)	(⁴)
Freestanding accounts ⁵	5	6	5	4
Other ⁶	(⁴)	(⁴)	(⁴)	(⁴)
Regular contributions to pension plans on a pretax basis	1	1	1	(⁴)
Defined benefit plans ⁷	(⁴)	(⁴)	(⁴)	(⁴)
Money purchase plans ⁸	1	1	1	(⁴)
Deferral of profit sharing allocation ⁹	3	3	4	2

¹ Tabulations show percent of employees participating in plans that allow income, and associated tax, to be deferred. Not all participants may elect to have their income deferred. Includes employee contributions to retirement plans under several sections of the Internal Revenue Code (IRC). Excludes pretax contributions for insurance, dependent care, and other expenses under IRC section 125.

² The total may be less than the sum of individual items because some employees participate in more than one type of cash or deferred plan.

³ Employee may elect to make pretax contributions to a long-term savings or retirement account.

⁴ Less than 0.5 percent.

⁵ Employer contributions are not made to the plan.

⁶ Employee may allocate funds in a flexible benefits plan to a retirement account.

⁷ Required employee contributions to a defined benefit pension plan are made on a pretax basis, but an account separate from the pension plan is not established for these savings.

⁸ Employee may elect to make optional contributions to an existing plan on a pretax basis.

⁹ Employer profit sharing distribution may be taken in cash by the employee, triggering current year tax liability, or may be deferred into a long term account, with corresponding deferral of taxes.

NOTE: Sums of individual items may not equal totals either because of rounding or because some employees participate in more than one type of plan.

Table 126. Other benefits: Percent of full-time employees eligible for specified benefits, medium and large firms, 1988, former survey coverage

Benefit	All employees	Professional and administrative employees	Technical and clerical employees	Production and service employees
Income continuation plans:				
Severance pay	50	64	59	37
Supplemental unemployment benefits	8	4	4	12
Transportation benefits:				
Free or subsidized employee parking	85	83	80	89
Subsidized commuting	5	7	7	3
Job-related travel				
accident insurance	57	77	66	41
Gifts and cash bonuses:				
Gifts	17	19	16	16
Nonproduction bonuses	23	21	21	26
Financial and legal services:				
Financial counseling	12	15	14	9
Prepaid legal services	5	3	3	7
Family benefits:				
Employer assistance for child care	4	5	6	2
Employer assistance for adoption	7	11	9	3
Health promotion programs:				
In-house infirmary	39	44	34	39
Wellness programs	19	26	22	13
Employee assistance programs	50	60	51	44
Miscellaneous benefits:				
Employee discounts	53	52	56	52
Employer-subsidized recreation facilities	29	34	26	27
Subsidized meals	16	23	21	10
Relocation allowance	42	78	35	24
Education assistance:				
Job related	77	87	82	67
Not job related	20	20	20	20

Appendix A. Technical Note

Scope of survey

This survey of the incidence and characteristics of employee benefit plans covers private sector establishments¹ in the United States, excluding Alaska and Hawaii, employing at least 100 workers. Industrial coverage includes: Mining; construction; manufacturing; transportation, communications, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; and services.

Establishments meeting the minimum size criterion as of the reference date of the sampling frame are included in the survey, even if they employed fewer workers at the time of data collection. Establishments found to be outside the industrial scope of the survey at the time of data collection are excluded.

The industrial coverage and minimum establishment size for this survey differ from earlier private sector surveys conducted annually from 1979 to 1986. The previous surveys excluded most of the service industries, such as health and education services, and included only establishments which employed at least 250 workers in the mining, construction, retail trade, and some manufacturing and transportation industries. The tables in chapter 10 have approximately the same industrial and establishment size scope as the surveys conducted from 1979 to 1986.²

Table A-1 shows the estimated number of establishments and employees within the scope of the survey and the number within the sample actually studied for each major industry division. Table A-2 gives the same information for the establishments and employees in the former survey scope, which corresponds with the surveys conducted from 1979 to 1986 (chapter 10 tables).

Occupational groups

Data were collected individually for the following three broad occupational groups:

Professional-administrative. Includes occupations that require a foundation of knowledge in the theories, concepts,

¹ For this survey, an establishment is an economic unit that produces goods or services, a central administrative office, or an auxiliary unit providing support services to a company. In manufacturing industries, the establishment is usually a single physical location. In nonmanufacturing industries, all locations of an individual company within a Metropolitan Statistical Area (MSA) or within a nonmetropolitan county are usually considered an establishment.

² There is only one difference between the coverage of the 1979-86 surveys and the coverage of the tables in chapter 10. The 1979-86 surveys included establishments with 50-99 employees in accounting, auditing, and bookkeeping services; the 1988 survey included only establishments with 100 employees or more in this, as in other, industries.

principles, and practices of a broad field of science, learning, administration, or management acquired through a college-level education or the equivalent in progressively responsible experience. Above entry levels, the exercise of a high degree of creativity, originality, analytical ability, and independent judgment to solve varied and complex problems in the field of work is characteristic.

Technical-clerical. Includes office and sales clerical, technical support, protective services, and other such occupations that do not require full knowledge of a professional or administrative field of work or the application of a high level of creativity, originality, analytical ability, or independent judgment. Job performance skills are typically acquired through on-the-job experience and/or specific training which is less than that usually represented by a baccalaureate degree. These skills include the application of a practical knowledge of established procedures, practices, precedents, and guidelines.

Production-service. Includes skilled, semiskilled, and unskilled trades; craft and production occupations; manual labor occupations; custodial occupations; and operatives.

Excluded from the survey are executive employees (defined as those whose decisions have direct and substantial effects on an organization's policymaking); part-time, temporary, and seasonal employees; and operating employees in constant travel status, such as airline flight crews and long-distance truckdrivers.

Benefit areas

Sampled establishments were requested to provide data on work schedules and details of plans in each of the following benefit areas: Paid lunch periods, paid rest periods, paid holidays, paid vacations, paid personal leave, paid funeral leave, paid military leave, paid jury-duty leave, paid and unpaid parental leave, paid sick leave, sickness and accident insurance, long-term disability insurance, health insurance, life insurance, retirement and capital accumulation plans, and flexible benefits plans and reimbursement accounts.

Data were also collected on the incidence of the following other benefits: Severance pay, supplemental unemployment benefits, parking, subsidized commuting, travel accident insurance, nonproduction cash bonuses, financial counseling, prepaid legal services, gifts, child care, adoption assistance, in-house infirmaries, wellness programs, recreation facilities, subsidized meals, employee discounts, relocation allowances, educational assistance, and employee assistance programs.

Sampling frame

The list of establishments from which the sample was selected (called the sampling frame) was developed by refining data from the most recently available State Unemployment Insurance (UI) reports for the 48 States covered by the survey and the District of Columbia. The reference date of the available UI reports was generally March 1986. The refinement procedures included an effort to ensure that most sampling frame units corresponded to the definition of an establishment developed for this survey. (Some establishments in the services industries were not refined because of limited resources. A small number of additional sampling frame units were not refined to correspond to the definition of an establishment because of limited reporting ability of companies.)

Sampling design

The sample of 2,465 establishments³ was selected by first stratifying the sampling frame by industry group and establishment size group based on the total employment in the establishment. The industry groups consisted of two-digit Standard Industrial Classification Major Groups, as defined by the Office of Management and Budget.

The establishment size groups are defined as follows:

Employment size group	Establishment employment
4.....	100-249
5.....	250-499
6.....	500-999
7.....	1,000-2,499
8.....	2,500-4,999
9.....	5,000-9,999
10.....	10,000 and over

The number of sample establishments allocated to each stratum (defined by industry and size) was approximately proportional to the total employment of all sampling frame establishments in the stratum. Thus, a stratum that contained 1 percent of the total employment within the scope of the survey received approximately 1 percent of the total sample establishments.

A sample was then selected within each stratum using a probability technique to maximize the probability of retaining the establishments selected in the 1986 survey.⁴ This method of selection reduced collection costs by decreasing the number of new establishments in the sample.

Each sampled establishment was selected with a probability approximately proportional to the average establishment

employment within its stratum. For example, if strata A and B have respective average establishment employment of 5,000 and 1,000, then an establishment in stratum A is 5 times more likely to be selected than an establishment in stratum B.

Data collection

Data for the survey were collected by visits of Bureau field representatives to the sampled establishments. To reduce the reporting burden, respondents were asked to provide documents describing their flexible benefits plans and reimbursement accounts, retirement and capital accumulation plans, and plans covering the four insured benefit areas within the scope of the survey. These were analyzed by ELS staff in Washington to obtain the required data on plan provisions. Data on paid leave generally were obtained directly from the employer at the time of the visit.

Data were collected during the months of January through July, reflecting an average reference period of April 1988. Respondents were asked for information as of the time of the data collection visit.

Data tabulation

The tables presented in this bulletin show the percent of employees who were covered by paid leave plans or unpaid parental leave plans; participated in insurance, retirement, or capital accumulation plans; or were eligible for flexible benefits plans, reimbursement accounts, or other selected benefits. Except in tables 104 and 106, counts of workers covered by benefit plans included those who had not met possible minimum length-of-service requirements at the time of the survey.

Most of the tables in this bulletin show the percent of workers covered by individual benefit plans or plan provisions. Percentages are calculated in three ways. One technique, followed in tables 1-4, 6, 8, 11-15, 17, 19, 20, 90, and 91, shows the number of covered workers as a percent of all workers within the scope of the survey; tables 104 and 106 show the number of eligible workers as a percent of all workers.

A second approach is followed in tables 7, 9, 10, 16, 25, 27, 28, 30-36, 53, 54, 58, 59, 61, 62, 65, 66, 68, 69, 75, 76, 78, 79, 82, 83, 85, 87-89, 92, 94, 95, 97, 98, 100-103, and 105. These tables show the number of workers covered by specific features in a benefit area as a percent of all employees who participate in that general benefit area. They also answer questions concerning the typical coverage provided to persons with a given insurance, retirement, or capital accumulation plan; for example, what percent of all employees with health care receive prescription drug coverage?

The third approach provides a close look at an important plan feature (tables 26, 29, 37-52, 55-57, 60, 63, 64, 67, 70-74, 80, 86, and 96); for example, what percent of all

³ The number of sample units selected in this survey is, at present, largely determined by resources and operational constraints.

⁴ This method modifies the method introduced by Nathan Keyfitz in "Sampling with Probabilities Proportional to Size: Adjusting for Changes in the Probabilities," *Journal of the American Statistical Association*, 1951, No. 46, pp. 105-9.

employees with dental coverage in their health insurance are covered for orthodontic work? Tables 81, 84, 93, and 99 combine the second and third types above, indicating in the first row of data the percent of persons in the benefit area who have a particular coverage, while the remainder of the table is based on all employees with that coverage. Table 24 uses a similar approach.

This multilevel approach has the advantage of clearly pointing out typical benefit plan characteristics after the incidence of the benefit has been established. Any of the second or third types of tables, if desired, can be converted to the first type by multiplying each data cell by the appropriate factors. For example, to calculate the percent of all employees in plans paying for eyeglasses, multiply the percent of those with vision plans that cover eyeglasses (67 percent from table 52) by the percent of health care participants with vision care coverage (35 percent from table 35), and multiply that product by the percent of all employees who have health insurance coverage (90 percent from table 1). In this example, 21 percent of employees are in plans that pay for eyeglasses (.67 x .35 x .90).

Tables 5, 18, 21-23, and 77 differ from other tables because they display average benefit values rather than percentages of workers. These tables present the averages for all covered employees; calculations exclude workers without the benefit.

Survey response

The following is a summary of the establishment responses to the survey:

Element	Number of establishments ⁵
In sample	2,465
Out of business and out of scope	66
Refusing to respond	326
Nonresponse other than refusal	7
Responding fully or partially	2,066

⁵ By design, health insurance and life insurance data were not collected from approximately 20 percent of the sampled establishments to reduce the large number of plans which required coding and keypunching in these two benefit areas. Health and life insurance data were requested from 1,922 establishments, and 1,653 of them responded either fully or partially.

A-1. Estimated number of establishments and workers within scope of survey and number studied, medium and large firms, United States,¹ 1988, complete survey coverage

Industry division ²	Number of establishments	Number of workers in establishments			
		Total ³	Professional and administrative	Technical and clerical	Production and service
		Within scope of survey			
All industries	106,842	39,516,123	8,747,101	7,411,469	14,900,052
Manufacturing	34,806	13,904,552	3,064,244	1,792,327	8,467,577
Nonmanufacturing	72,037	25,611,571	5,682,857	5,619,142	6,432,475
Mining	1,217	434,332	141,373	67,299	220,644
Construction	3,642	530,287	81,805	54,439	284,789
Transportation, communications, electric, gas, and sanitary services	5,530	3,132,388	675,079	641,541	1,191,477
Wholesale trade	5,991	1,414,144	456,288	330,617	528,271
Retail trade	19,634	6,838,715	765,868	1,014,619	1,821,168
Finance, insurance, and real estate	8,364	3,283,569	1,180,349	1,667,819	131,592
Services	27,658	9,978,136	2,382,094	1,842,810	2,254,534
		Studied ⁴			
All industries	2,066	5,638,038	1,672,829	1,237,520	1,969,511
Manufacturing	688	2,485,335	834,694	390,876	1,224,404
Nonmanufacturing	1,378	3,152,703	838,135	846,644	745,107
Mining	27	32,467	14,038	6,548	11,666
Construction	32	16,209	3,129	2,165	9,305
Transportation, communications, electric, gas, and sanitary services	148	1,042,051	233,363	250,831	384,611
Wholesale trade	83	121,550	64,885	44,182	10,925
Retail trade	266	588,737	61,663	105,383	137,147
Finance, insurance, and real estate	188	441,563	172,227	229,284	7,089
Services	634	910,126	288,630	208,251	184,364

¹ Excludes Alaska and Hawaii and establishments with fewer than 100 workers.

² As defined in the 1972 edition of the *Standard Industrial Classification Manual*, U.S. Office of Management and Budget. Industry data are shown for informational purposes only and are subject to larger than normal sample error. See section on reliability of estimates.

³ This figure includes out-of-scope workers. These workers—executive management, part time, temporary, seasonal, and operating person-

nel in constant travel status (e.g., airline pilots)—are excluded from the counts of employment by occupational group.

⁴ These figures refer to all respondents to the survey, whether or not they provided data for all items studied. See the section on survey response.

NOTE: Because of rounding, sums of individual items may not equal totals.

A-2. Estimated number of establishments and workers within scope of survey and number studied, medium and large firms, United States,¹ 1988, former survey coverage

Industry division ²	Number of establishments	Number of workers in establishments			
		Total ³	Professional and administrative	Technical and clerical	Production and service
	Within scope of survey				
All industries	47,363	25,199,788	6,075,875	5,368,471	9,971,693
Manufacturing	20,231	11,594,054	2,758,804	1,572,940	6,817,194
Nonmanufacturing	27,132	13,605,734	3,317,071	3,795,531	3,154,499
Mining	494	304,529	105,553	53,187	143,395
Construction	565	189,003	51,245	34,954	70,872
Transportation, communications, electric, gas, and sanitary services	3,824	2,839,487	647,281	621,080	1,072,724
Wholesale trade	5,991	1,414,144	456,288	330,617	528,271
Retail trade	6,360	4,831,468	489,265	814,441	1,165,982
Finance, insurance, and real estate	8,351	3,283,411	1,180,323	1,667,793	131,486
Services	1,547	743,693	387,117	273,459	41,769
	Studied ⁴				
All industries	1,322	4,787,140	1,433,159	1,051,965	1,775,913
Manufacturing	615	2,471,505	832,134	389,475	1,215,658
Nonmanufacturing	707	2,315,635	601,025	662,490	560,255
Mining	19	31,032	13,642	6,392	10,812
Construction	17	14,545	2,980	2,070	8,262
Transportation, communications, electric, gas, and sanitary services	139	1,040,450	233,215	250,726	383,900
Wholesale trade	83	121,550	64,885	44,182	10,925
Retail trade	199	578,522	60,258	104,275	133,786
Finance, insurance, and real estate	187	441,551	172,225	229,282	7,081
Services	63	97,985	53,820	25,563	5,489

¹ Excludes Alaska and Hawaii. Minimum establishment size was 100 or 250 workers, depending on the industry. The services industries were limited to selected business services; engineering, architectural, and surveying services; and noncommercial industrial, scientific, and research organizations.

² As defined in the 1972 edition of the *Standard Industrial Classification Manual*, U.S. Office of Management and Budget. Industry data are shown for informational purposes only and are subject to larger than normal sample error. See section on reliability of estimates.

³ This figure includes out-of-scope workers. These workers—execu-

tive management, part time, temporary, seasonal, and operating personnel in constant travel status (e.g., airline pilots)—are excluded from the counts of employment by occupational group.

⁴ These figures refer to all respondents to the survey, whether or not they provided data for all items studied. See the section on survey response.

NOTE: Because of rounding, sums of individual items may not equal totals.

There are three procedures used to adjust for missing data from partial schedules and total refusals. First, imputations for the number of plan participants are made for cases where this number was not reported (from 1 to 7 percent of participants in insurance, and retirement and capital accumulation plans and less than 1 percent of participants in paid leave plans). Each of these participant values is imputed by randomly selecting a similar plan from another establishment in a similar industry, geographic region, and establishment size. The participant rate from this randomly selected plan is then used to approximate the number of participants for the plan which is missing a participation value in an establishment which has provided only a portion of the data requested.

Second, imputations for plan provisions are made where they are not available in a partially responding establishment. These plan provisions are imputed by randomly selecting a similar plan from another establishment in a similar industry,

geographic region, and establishment size. The plan provisions from this randomly selected plan are then used to represent the plan which is missing plan provision data. (This was done for about 5 percent of participants in sickness and accident insurance plans, 30 percent of health and long-term disability insurance participants, 35 percent of retirement and capital accumulation plan participants, and 40 percent of life insurance plan participants. Imputations were done for less than 1 percent of participants in paid leave plans.)

For other forms of missing data (totally unusable reports and refusals), a weight adjustment is made using the sample unit employment. This technique assumes that the mean value of the nonrespondents is equal to the mean value of the respondents at some detailed "cell" level. These cells are defined in a manner that groups establishments together which are homogeneous with respect to the characteristics of interest. In most cases, these cells are the same as those used for sample selection.

Survey estimation methods

The survey design uses an unbiased estimator, the Horvitz-Thompson, which assigns the inverse of each sample unit's probability of selection as a weight to the unit's data. The estimator is modified to account for a weight adjustment factor developed during the adjustment for nonresponse. The general form of the estimator for a population total is:

$$Y = \sum_{i=1}^n \frac{Y_i}{P_i}$$

where n = sample size

Y_i = value for the characteristics of the i th unit
 P_i = the probability of including the i th unit in the sample.

The basic form of the estimator, after modification to account for the weight adjustment factor, f_i , developed during the adjustment for nonresponse, is:

$$Y = \sum_{i=1}^{n'} \frac{f_i Y_i}{P_i}$$

where n' = number of responding units

f_i = weight adjustment factor for the i th unit.

Appropriate employment or establishment totals are used to calculate the proportion, mean, or percentage that is desired.

Reliability of estimates

The statistics in this bulletin are estimates derived from a sample of 2,066 responding establishments, rather than tabulations based on all of the approximately 106,800 medium and large establishments within the scope of the survey. Consequently, the data are subject to sampling errors, as well as nonsampling errors.

Sampling errors are the differences that can arise between results derived from a sample and those computed from observations of all units in the population being studied. When probability techniques are used to select a sample, as in the Employee Benefits Survey, statistical measures called "standard errors" can be calculated to measure possible sampling errors.

This evaluation of survey results involves the formation of confidence intervals that can be interpreted in the following manner: Assume that repeated random samples of the same size were drawn from a given population and an estimate of some value, such as a mean or percentage, was made from each sample. Then, the intervals described by 1 standard error

below each sample's estimate and 1 standard error above would include the population's value for 68 percent of the samples. Confidence rises to 90 percent if the intervals surrounding the sample estimates are widened to plus and minus 1.6 standard errors, and to 95 percent if the intervals are increased to plus and minus 2 standard errors.

Chart A-1 provides standard errors for use in evaluating the estimates in the 100 tables shown in chapters 2-9 of this bulletin containing percentage estimates. For example, table 1 shows that 69 percent of all employees participated in sick leave plans in 1988. Chart A-1 shows a standard error of slightly more than 1.4 percent for this estimate. (The bold lines on chart A-1 show how to read the standard error for an estimate of 69 percent.) Thus, at the 95-percent level, the confidence interval for this estimate is 66 percent to 72 percent (69 plus and minus 2 times 1.4 percent). Chart A-2 provides similar standard errors for the percentage estimates shown in chapter 10.

Standard errors for tables 5 and 21-23 in chapters 3 and 4 could not be generalized into graphic representation. They are presented as tables A-3, A-4, A-5, and A-6. For example, the first entry in table 21 shows an average of 9.8 days of annual sick leave at 6 months of service. The standard error for this estimate is 0.5 days. Standard errors for tables 108 and 113 in chapter 10 are presented in tables A-7 and A-8 in a similar fashion.

Standard errors cannot be computed for the replacement rates shown in table 77. The rates shown in this table are projections based on models of the pension plan provisions. Table 18 shows both survey estimates of short-term disability benefits and replacement rates derived from these estimates. Standard errors are not yet available for this table.

Nonsampling errors also affect survey results. They can be attributed to many sources: Inability to obtain information about all establishments in the sample; definitional difficulties; differences in the interpretation of questions; inability or unwillingness of respondents to provide correct information; mistakes in recording or coding the data; and other errors of collection, response, processing, coverage, and estimation for missing data. Through the use of computer edits of the data and professional review of both individual and summarized data, efforts are made to reduce the nonsampling errors in recording, coding, and processing the data. However, to the extent that the characteristics of nonrespondents are not the same as those of respondents, nonsampling errors are introduced in the development of estimates. Because the impact of these limitations on the survey estimates is unknown, reliability measurements are incomplete.

For those readers interested in further mathematical details, the next section describes how charts A-1 and A-2 were derived.

Mathematical details on estimates and generalized standard errors charts. Each estimator used in the production of the tables in this bulletin is approximately normally distributed.

Standard errors for the percentage estimates were com-

Chart A-1 Generalized standard errors, medium and large firms, 1988

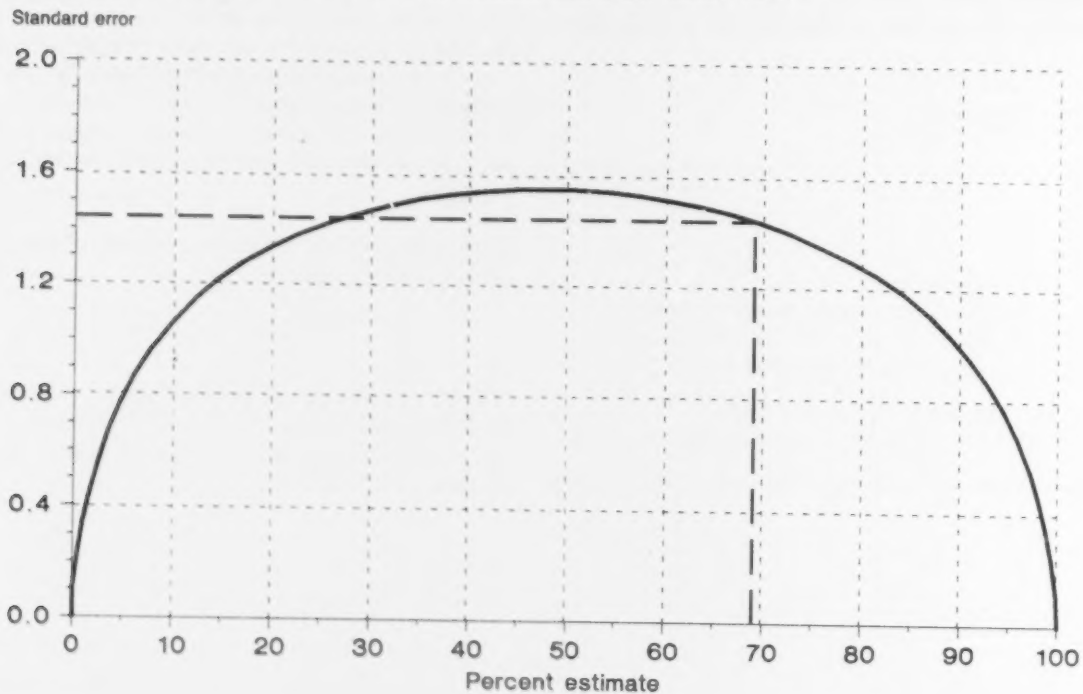
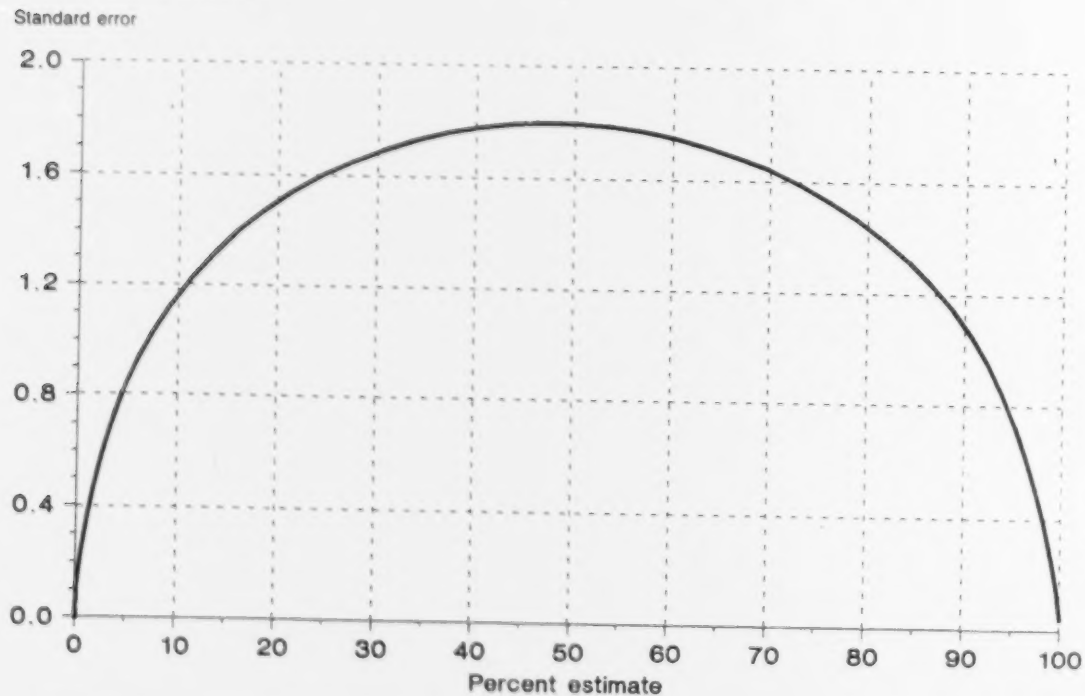


Chart A-2 Generalized standard errors, medium and large firms, 1988, former survey coverage



puted from a representative portion of the 1988 survey data. To simplify their presentation, a curve was fitted to the standard error estimates, by regression techniques (chart A-1).

The curve's equation is:

$$S = e^{[a + b \{ \ln(P) \}^2 + c \{ \ln(100-P) \}^2 + d \ln(P) \ln(100-P)]}$$

where:

S = standard error

P = percentage estimate from the bulletin

e = exponential function

ln = natural logarithm function.

For the 1988 Employee Benefits Survey,

a = 0.04783, b = -0.06055, c = -0.05633, and d = 0.14227.

These are regression coefficients. The curve fits the data with

$R^2 = 0.87$ and no pattern in the residuals.

The curve for chart A-2 was derived in a similar fashion from the 1986 old scope survey data. (The 1986 EBS estimates are comparable to the estimates shown in chapter 10.) The curve in chart A-2 fits the 1986 data with $R^2 = 0.85$ and no pattern in the residuals. Moreover, differences between this curve and curves based on previous years' survey data are negligible.

The equations of the curves were obtained empirically, by starting with the equation:

$$S = a P^b (100 - P)^c.$$

More information describing survey response and reliability may be obtained from the Office of Compensation and Working Conditions, Bureau of Labor Statistics, Washington, D.C. 20212.

Table A-3. Standard errors for table 5 -- Paid holidays and vacations: Average number of days for full-time participants, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Paid holidays	0.04	0.04	0.05	0.08
Paid vacation by length of service:				
At 6 months	.07	.10	.07	.09
At 1 year	.07	.10	.09	.08
At 3 years	.06	.09	.09	.08
At 5 years	.06	.09	.10	.07
At 10 years	.06	.08	.10	.07
At 15 years	.09	.07	.10	.10
At 20 years	.09	.07	.10	.10
At 25 years	.10	.10	.20	.20
At 30 years	.10	.10	.20	.20

Table A-4. Standard errors for table 21 -- Paid sick leave: Average number of days at full pay for full-time participants by type of plan, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Paid annual sick leave by length of service:				
At 6 months	0.5	0.7	0.3	1.6
At 1 year	.5	.7	.4	1.3
At 3 years	.6	.8	.5	1.2
At 5 years	.7	.8	.6	1.2
At 10 years	1.0	1.4	1.1	1.4
At 15 years	1.1	1.5	1.3	1.5
At 20 years	1.2	1.6	1.5	1.7
At 25 years	1.3	1.7	1.6	1.9
At 30 years	1.3	1.8	1.7	1.9
Paid per disability sick leave by length of service:				
At 6 months	3.8	3.3	4.1	6.6
At 1 year	3.9	3.6	4.3	5.5
At 3 years	3.6	3.2	3.5	4.5
At 5 years	3.0	2.5	2.8	4.6
At 10 years	2.9	3.3	3.0	4.0
At 15 years	3.1	3.4	3.4	5.0
At 20 years	3.8	3.7	3.8	7.2
At 25 years	4.8	4.2	4.7	9.8
At 30 years	4.9	4.2	4.7	9.8

Table A-5: Standard errors for table 22 -- Paid annual sick leave: Average number of days at full pay for full-time participants by accumulation policy and sickness and accident insurance coordination, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants	Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
At 1 year of service:					At 15 years of service:				
Cumulative plan	0.2	0.5	0.2	0.3	Cumulative plan	1.1	1.8	1.3	0.8
With sickness and accident insurance	.3	.4	.3	.2	With sickness and accident insurance	1.9	3.6	2.6	.4
Without sickness and accident insurance	.3	.7	.2	.5	Without sickness and accident insurance	1.4	2.2	1.5	1.4
Noncumulative plan	.7	1.5	.7	1.8	Noncumulative plan	1.6	1.4	1.7	2.4
With sickness and accident insurance	.5	1.8	.5	.3	With sickness and accident insurance	2.3	3.9	2.8	2.2
Without sickness and accident insurance	1.1	2.0	1.1	3.3	Without sickness and accident insurance	2.6	2.6	2.9	4.1
At 5 years of service:					At 20 years of service:				
Cumulative plan	.5	.8	.6	.4	Cumulative plan	1.1	1.8	1.3	1.0
With sickness and accident insurance	.7	1.3	1.1	.2	With sickness and accident insurance	2.0	3.7	2.7	.5
Without sickness and accident insurance	.6	1.1	.7	.7	Without sickness and accident insurance	1.4	2.3	1.5	1.8
Noncumulative plan	.8	1.1	.7	1.7	Noncumulative plan	1.9	1.9	2.1	2.6
With sickness and accident insurance	.8	1.9	1.0	.9	With sickness and accident insurance	2.7	4.7	3.1	2.8
Without sickness and accident insurance	1.5	1.9	1.6	3.0	Without sickness and accident insurance	2.9	2.9	3.2	4.2
At 10 years of service:					At 25 years of service:				
Cumulative plan	1.1	1.8	1.3	.8	Cumulative plan	1.1	1.8	1.3	1.0
With sickness and accident insurance	1.8	3.4	2.5	.3	With sickness and accident insurance	2.0	3.7	2.7	.5
Without sickness and accident insurance	1.4	2.3	1.5	1.4	Without sickness and accident insurance	1.4	2.3	1.5	1.8
Noncumulative plan	1.3	1.2	1.3	2.2	Noncumulative plan	2.1	2.2	2.3	2.9
With sickness and accident insurance	1.6	3.0	1.5	1.6	With sickness and accident insurance	3.2	5.4	3.5	3.4
Without sickness and accident insurance	2.3	2.4	2.5	3.8	Without sickness and accident insurance	3.1	3.0	3.5	4.7

Table A-6. Standard errors for table 23 -- Paid annual sick leave: Average number of days at full pay for full-time participants by sickness and accident insurance coordination, medium and large firms, 1988

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
At 1 year of service:				
With sickness and accident insurance ...	0.3	0.8	0.2	0.2
Without sickness and accident insurance ...	.6	1.0	.6	2.1
At 5 years of service:				
With sickness and accident insurance ...	.7	1.2	.9	.5
Without sickness and accident insurance ...	.8	1.0	.9	2.0
At 10 years of service:				
With sickness and accident insurance ...	1.4	2.6	1.7	.9
Without sickness and accident insurance ...	1.2	1.5	1.3	2.4
At 15 years of service:				
With sickness and accident insurance ...	1.7	2.9	2.2	1.2
Without sickness and accident insurance ...	1.3	1.4	1.5	2.6
At 20 years of service:				
With sickness and accident insurance ...	1.9	3.2	2.3	1.5
Without sickness and accident insurance ...	1.3	1.5	1.6	2.7
At 25 years of service:				
With sickness and accident insurance ...	2.1	3.5	2.5	1.6
Without sickness and accident insurance ...	1.5	1.5	1.6	3.1

Table A-7. Standard errors for table 108 -- Paid holidays and vacations: Average number of days for full-time participants, medium and large firms, 1988, former survey coverage

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Paid holidays	0.06	0.05	0.05	0.09
Paid vacation by length of service:				
At 6 months	.08	.08	.07	.10
At 1 year	.07	.08	.08	.10
At 3 years	.05	.07	.07	.08
At 5 years	.06	.07	.10	.07
At 10 years	.07	.08	.10	.07
At 15 years	.09	.08	.10	.10
At 20 years	.10	.09	.10	.10
At 25 years	.10	.10	.20	.20
At 30 years	.20	.10	.20	.20

Table A-8. Standard errors for table 113 -- Paid sick leave: Average number of days at full pay for full-time participants by type of plan, medium and large firms, 1988, former survey coverage

Item	All participants	Professional and administrative participants	Technical and clerical participants	Production and service participants
Paid annual sick leave by length of service:				
At 6 months	0.8	0.9	0.4	2.5
At 1 year	.7	.9	.5	1.9
At 3 years	.8	1.1	.7	1.7
At 5 years	.9	1.1	.9	1.8
At 10 years	1.5	1.9	1.6	2.0
At 15 years	1.7	2.1	1.9	2.3
At 20 years	1.8	2.2	2.0	2.5
At 25 years	2.0	2.4	2.2	2.8
At 30 years	2.0	2.5	2.3	2.8
Paid per disability sick leave by length of service:				
At 6 months	4.5	4.0	4.9	7.7
At 1 year	4.5	4.2	5.0	6.2
At 3 years	4.0	3.7	4.0	4.8
At 5 years	3.4	3.0	3.2	5.0
At 10 years	2.6	2.7	3.1	3.8
At 15 years	2.7	2.8	3.1	4.8
At 20 years	3.3	3.1	3.3	7.0
At 25 years	4.4	3.7	4.1	9.5
At 30 years	4.4	3.7	4.2	9.6

Appendix B. Availability of the Survey's Data Base

The tables published in this bulletin present the major findings of the employee benefits survey in medium and large private firms; results of additional research appear in the *Monthly Labor Review*. However, the statistical tables in these publications cover only a portion of the employee benefits information collected. Persons interested in all provisions of a particular benefit studied during the annual survey can purchase a set of magnetic tapes containing the survey's data base through the Office of Compensation and Working Conditions, Bureau of Labor Statistics, Washington, D.C. 20212. The charge for furnishing the data is limited to the cost of producing the tapes and preparing supporting documentation.

For major benefit items, the BLS survey obtained plan provisions and employee participation data for each of three employee groups (professional and administrative, technical and clerical, and production and service). Information on employer costs was not collected. The magnetic tapes, which consist of a control file and plan data files for each benefit area, may be used to derive national estimates, similar to those published in this bulletin, for other items in the data base. For some data items not presented in this bulletin, however, the data file is insufficient to produce reliable national estimates, because either information on the provisions frequently was not available or the number of employees covered under the provision was very small. Moreover, the tapes cannot yield reliable estimates for individual industries, geographic regions, or establishment size classes. Full documentation accompanies the tapes, including examples of estimating formulas. Although Bureau staff will respond to questions concerning the content of the tapes, technical assistance in developing estimates is limited due to the heavy workload associated with the survey program.

Data users can purchase tapes with details of plans for one benefit area or all, i.e., health care; life, sickness and accident, and long-term disability insurance; retirement and capital accumulation plans; flexible benefits and reimbursement accounts; and time-off provisions—lunch time, rest periods, holidays, personal leave, vacations, funeral leave, jury-duty leave, military leave, maternity leave, paternity leave, and sick leave. (Table 104 presents all of the information collected on the other surveyed benefits.) The plan data file contains provisions for each plan that was reported and for which usable information was available. However, plan identification numbers on the tape

are scrambled (and other identifying information is removed) to protect the confidentiality of responding establishments.

Purchasers also receive the control file, which contains establishment information required to produce estimates from the plan data. Control file records include establishment size codes; geographic, industrial, and employee group classification codes; and the weighted number of workers in each employee group. The control file also lists all benefit plans offered in an establishment, with the weighted number of plan participants in each employee group. A plan is listed on more than one control file record if it covers employees in more than one establishment. Although plan identification numbers on the control file are scrambled, the same scrambled numbers appear on the data file so they can be matched to make estimates. Because establishment schedule numbers on the control file are scrambled differently for each employee group, it will not be possible to link together plans offered to different employee groups within an establishment.

Benefit provisions obtained from plan documents are recorded in coding manuals for health care, insurance, retirement, and capital accumulation plans, and are then entered on the plan data file. A set of coding manuals and instructions for completing them are supplied to tape purchasers for interpretation of data on the file. Time off and flexible benefits provisions are reported directly on collection forms, copies of which are also provided to tape purchasers.

The analysis of health care, insurance, retirement, and capital accumulation plans is extremely detailed. The following list of health care plan provisions included in the data base gives an indication of the breadth and depth of the information available on the magnetic tapes. Other benefits are similarly detailed.

Health care data base

Plan participation requirements

- Employee monthly contribution for employee and family benefits
- Pretax status of contributions

- Fee arrangement and funding media
 - Medical coverage
 - Dental benefits
 - Vision benefits

- Administration
 - Pre-existing conditions
 - Difference in benefits provided for employee and spouse
- Effect of layoff and retirement
 - Retired employees benefit coverage
 - Laid-off employees benefit coverage
- Hospital coverage
 - Hospital room and board coverage
 - Hospital miscellaneous charges
- Extended care
 - Extended care facility coverage
 - Home health care coverage
- Surgical coverage
 - In-hospital surgical coverage
 - Second surgical opinion
 - Outpatient surgical coverage
- Physician charges
 - In-hospital coverage
 - Office visit coverage
- Maternity care benefits
 - Who is covered
- Diagnostic X-ray and laboratory testing coverage
- Accidental bodily injury benefit
- Private duty nursing benefit
- Mental health care benefits
 - In-hospital room and board charges
 - In-hospital physician charges
 - Coverage for mental or psychiatric hospital
 - Outpatient mental health care
- Substance abuse benefits
 - In-hospital rehabilitative care
 - In-hospital detoxification care
 - Outpatient care
 - (separate questions for alcohol abuse and drug abuse)
- Prescription drug benefits
- Other benefits
 - Hearing care

- Orthoptics
- Hospice care
- Physical examinations
- Organ transplants
- Well-baby care
- Immunization and inoculation
- Long-term nursing care

Cost containment features

- Dental care benefits
 - Who is covered
 - Prophylaxis and routine exams
 - X-rays
 - Fillings
 - Surgery—dental
 - Inlays
 - Crowns
 - Periodontal care
 - Endodontics
 - Prosthetics
 - Orthodontia
 - Pre-authorization requirement

- Vision care benefits
 - Who is covered
 - Eyeglasses
 - Eye examinations
 - Contact lenses

- Overall limitations
 - Overall deductible
 - Overall maximum
 - Overall coinsurance
 - Out-of-pocket expense limitation

Each medical expense section (e.g., hospitalization, prescription drugs, physician charges) contains information on internal limitations; these limits apply only to that category of care. For example, hospital room and board may have an internal limitation of 120 days per confinement. Information on overall limitations is also included in each section, identifying limits that apply to more than one category of care. These overall limitations—deductibles, maximums, coinsurance, and out-of-pocket expense limitations—are then described at the end of the coding manual. Three sets of data on overall limitations are available for plans that include multiple overall limits.

Employee Benefits in State and Local Governments, 1987

U.S. Department of Labor
Bureau of Labor Statistics
Bulletin 2309

The Bureau of Labor Statistics issues its first bulletin on employee benefits in State and local governments.

Data available

- Incidence and detailed characteristics of 14 employee benefits paid for at least in part by employer: Lunch and rest periods, holidays, vacations, and personal, funeral, jury duty, military, and sick leave, sickness and accident, long-term disability, health, and life insurance, and retirement/capital accumulation plans. Retirement data include defined benefit plans and defined contribution plans, such as savings and thrift plans with salary reduction arrangements permitted under the Internal Revenue Code.
- Incidence and provisions of flexible benefits plans, reimbursement accounts, and unpaid maternity and paternity leave.
- Incidence data on 16 other benefits, including educational assistance, nonproduction bonuses, subsidized child care, and sabbatical leave.
- Data are presented separately for three occupational groups—teachers, police officers and firefighters, and regular employees.

Coverage

- Major benefits in State and local government establishments of the United States, except Alaska and Hawaii.
- Local governments with at least 50 employees, and the entire State government for States.

Source of data

- Sample of about 869 government units, including 24 States and 845 local government establishments; primarily by personal interview.

Employee Benefits in State and Local Governments, 1987



Uses

- Benefit administration in public and private employment.
- Union contract negotiations.
- Conciliation and arbitration in public and private sectors.
- Development of legislation affecting the welfare of workers.

Publications are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, or from BLS Publications Sales Center, P.O. Box 2145, Chicago, IL 60690.



Order Form

Please send _____ copies of *Employee Benefits in State and Local Governments, 1987*, Bulletin 2309, Stock No. 029 001-02976-4 at \$4.50 each. Total \$ _____

☐ Enclosed is a check or money order payable to Superintendent of Documents

☐ Charge to GPO deposit account no. _____

Order No. _____

☐ Charge to ☐



☐ Credit Card No. _____

* Expiration date _____

Name _____

Organization (if applicable) _____

Address _____

City, State, Zip Code _____

Bureau of Labor Statistics

Regional Offices



Region I

Kennedy Federal Building
Suite 1603
Boston, MA 02203
Phone: (617) 565-2327

Region II

Room 808
201 Varick Street
New York, NY 10014
Phone: (212) 337-2400

Region III

3535 Market Street
P.O. Box 13309
Philadelphia, PA 19101
Phone: (215) 596-1154

Region IV

1371 Peachtree Street, N.E.
Atlanta, GA 30367
Phone: (404) 347-4416

Region V

9th Floor
Federal Office Building
230 S. Dearborn Street
Chicago, IL 60604
Phone: (312) 353-1880

Region VI

Federal Building
525 Griffin Street, Room 221
Dallas, TX 75202
Phone: (214) 767-6970

Regions VII and VIII

911 Walnut Street
Kansas City, MO 64106
Phone: (816) 426-2481

Regions IX and X

71 Stevenson Street
P.O. Box 3766
San Francisco, CA 94119
Phone: (415) 995-5605

U.S. Department of Labor
Bureau of Labor Statistics
Washington, D.C. 20212

Official Business
Penalty for Private Use, \$300

Postage and Fees Paid
U.S. Department of Labor

Third Class Mail

Lab-441

